S. Hrg. 112–9

NOMINATIONS OF: KATHARINE G. ABRAHAM, CARL SHAPIRO, AND PETER A. DIAMOND

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

THE NOMINATIONS OF:

KATHARINE G. ABRAHAM, OF IOWA, TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS

CARL SHAPIRO, OF CALIFORNIA, TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS

PETER A. DIAMOND, OF MASSACHUSETTS, TO BE A MEMBER OF THE BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

MARCH 8, 2011

Printed for the use of the Committee on Banking, Housing, and Urban Affairs

Available at: http://www.fdsys.gov/

U.S. GOVERNMENT PRINTING OFFICE

65–828 PDF WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

TIM JOHNSON, South Dakota, *Chairman*

JACK REED, Rhode Island	RICHARD C. SHELBY, Alabama
CHARLES E. SCHUMER, New York	MIKE CRAPO, Idaho
ROBERT MENENDEZ, New Jersey	BOB CORKER, Tennessee
DANIEL K. AKAKA, Hawaii	JIM DEMINT, South Carolina
SHERROD BROWN, Ohio	DAVID VITTER, Louisiana
JON TESTER, Montana	MIKE JOHANNS, Nebraska
HERB KOHL, Wisconsin	PATRICK J. TOOMEY, Pennsylvania
MARK R. WARNER, Virginia	MARK KIRK, Illinois
JEFF MERKLEY, Oregon	JERRY MORAN, Kansas
MICHAEL F. BENNET, Colorado	ROGER F. WICKER, Mississippi
KAY HAGAN, North Carolina	

DWIGHT FETTIG, *Staff Director*
WILLIAM D. DUHNKE, *Republican Staff Director*

BRIAN FILIPOWICH, *Legislative Assistant*
LISA FRUMIN, *Legislative Assistant*

ANDREW J. OLMEM, JR., *Republican Chief Counsel*
MICHAEL PIWOWAR, *Republican Chief Economist*

DAWN RATLIFF, *Chief Clerk*
LEVON BAGRAMIAN, *Hearing Clerk*
SHELVIN SIMMONS, *IT Director*
JIM CROWELL, *Editor*

C O N T E N T S

TUESDAY, MARCH 8, 2011

NOMINEES

THE NOMINATIONS OF:

KATHARINE G. ABRAHAM, OF IOWA, TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS;

CARL SHAPIRO, OF CALIFORNIA, TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS;

PETER A. DIAMOND, OF MASSACHUSETTS, TO BE A MEMBER OF THE BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

TUESDAY, MARCH 8, 2011

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 10:05 a.m., in room SD–538, Dirksen Senate Office Building, Hon. Tim Johnson, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN TIM JOHNSON

Chairman JOHNSON. Good morning. I call this meeting to order.

Today, we consider three nominations. Dr. Peter Diamond has been nominated to become a member of the Board of Governors of the Federal Reserve System, and Drs. Katharine Abraham and Carl Shapiro have been nominated to be members of the Council of Economic Advisers.

At present, our economy is recovering from one of the worst downturns in history. We have seen some signs of progress, but for more than 13 million Americans who are out of jobs and looking for a job, the recovery cannot come to soon. Unemployment remains at about 9 percent, and even with hundreds of thousands of new jobs added every month, it will take years to get back to precrisis levels.

At the same time, we face daunting long-term budgetary imbalances, strong foreign competition, rising oil prices, and the ever present need to maintain low inflation. It is for these reasons that we need all hands on deck for our Nation's economy policymaking. I am glad that the President has sent us three extremely qualified individuals to fill current vacancies in posts important to our Nation's economic recovery.

Dr. Peter Diamond is a distinguished economist who has worked on unemployment, economic growth, and the economics of Social Security and pensions. He has served as President of the American Economic Association and President of the Econometric Society. Since his original nomination in 2010, he was awarded, along with two other economists, the Nobel Prize in Economics. The models for which Dr. Diamond won the Nobel Prize helped us understand the ways in which unemployment, job vacancies, and wages are impacted by regulation and economic policy. His search theory has also been used to study questions related to monetary theory, public economics, financial economics, regional economics, and family economics.

Sir James Mirrlees, a 1996 Nobel Prize winner in economics, said of Dr. Diamond, "No economist is smarter. His reasoning is amazingly accurate. The theories and models he uses are defined with the greatest precision. More than most economic theorists, he has always chosen his research topics and questions for their real importance."

Dr. Diamond was reported favorably with bipartisan support by this Committee twice in the last session of Congress by votes of sixteen to seven.

Dr. Katharine Abraham is a professor in the Joint Program in Survey Methodology and Faculty Associate in the Population Research Center at the University of Maryland. Dr. Abraham served as a Commissioner for the Bureau of Labor Statistics at the U.S. Department of Labor from 1993 to 2001. She joined the University of Maryland in 1987, where she served as a Professor of Economics and she also taught at MIT's Sloan School of Management from 1980 to 1985. Dr. Abraham received her Ph.D. in economics from Harvard in 1982 and her B.A. in economics from Iowa State University in 1976.

Dr. Carl Shapiro is the Deputy Assistant Attorney General for Economics at the Antitrust Division of the U.S. Department of Justice, where he supervises more than 50 Ph.D. economists in the Antitrust Division's Economic Analysis Group. Dr. Shapiro is on leave from the University of California at Berkeley, where he is the Transamerica Professor of Business Strategy at the Haas School of Business and a Professor of Economics. He earned his Ph.D. in economics from MIT in 1981.

I thank all of the nominees for your willingness to serve at the Federal level, especially at a time when our country is trying to overcome significant economic challenges.

Senator Shelby, would you like to give a statement?

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. I do. Thank you, Mr. Chairman, for calling these hearings. They are very important.

Today, we are considering the nominations of three economists, two to be members of the Council of Economic Advisers and one to be a member of the Board of Governors.

Dr. Katharine Abraham and Dr. Carl Shapiro have been nominated to be members of the Council of Economic Advisers, CEA. The CEA is an agency within the Executive Office of the President that is charged with providing the President economic advice. Although I do not share many of the policy preferences of these nominees, I am inclined to give greater deference to the President in his choice for his own personal economic advisers.

I do not believe, however, that the same deference should be given to nominations for our financial regulators. In light of the inexcusable failures leading up to the recent crisis, I believe that the Senate needs to take a much more active role in ensuring that our financial regulators have the proper leadership. The poor job our regulators did in supervising our financial institutions was a key contributor to the recent financial crisis. If we learned anything, it is that it matters who serves in these very important positions.

That is especially true at the Federal Reserve. The Fed's collective authorities make it one of the most powerful organizations in the world. It supervises our largest financial institutions and has extensive regulatory authority over our entire financial system. The Federal Reserve's inherent independence and the 14-year terms of Governors make it the least accountable agency in our Government. As a result, Fed Governors exercise immense power with very little oversight.

It is proper, therefore, that the Senate should take its constitutional advice and consent duties for Fed nominees very, very seriously. In my opinion, the nomination of a Fed Governor is the economic equivalent of a Supreme Court nomination and should be treated accordingly.

Applying this standard to the nomination of Dr. Peter Diamond to the Board of Governors, I believe that Dr. Diamond should not be confirmed. Dr. Diamond is, of course, a very accomplished academic and economist. Nevertheless, a reasonable comparison of the qualities a Fed Governor should possess and Dr. Diamond's background clearly demonstrates that he is not the right person, I believe, for this particular job.

The Fed's responsibilities cut across three broad areas: Conducting monetary policy, supervising our financial system, and responding to financial crises. Any qualified nominee should have, at a minimum, some level of experience in at least one of these areas. Let us examine Dr. Diamond's experience in each of these areas.

Does Dr. Diamond have any experience in conducting monetary policy? The answer is no. In the written testimony that Dr. Diamond provided for his nomination hearing last July, he listed several areas of focus in his teaching and research. Monetary economics is not on the list. Instead, his academic work has been one on pensions and labor market theory.

Does Dr. Diamond have any experience in bank management or supervision? Of course, the answer is no. None of his professional positions or activities involves working as a bank regulator or even working in a bank.

Does Dr. Diamond have any experience in crisis management? The answer is no. While his résumé contains an extensive list of academic and policy activities, none of them suggest that he has any experience in effectively managing a crisis, let alone a worldwide financial crisis.

In addition to a nominee's expertise and experience, their policy preferences also matter. A Fed Governor's economic philosophy impacts not only how the Fed exercises its vast regulatory authority, but also the tenor of its policy debates, because Fed Governors have a very powerful bully pulpit.

What are Dr. Diamond's policy preferences? Let me continue. He supports QE2. He supported President Obama's $800 billion stimulus package and has argued for additional fiscal stimulus. He wrote a paper with President Obama's former Budget Director, Peter Orszag, arguing for higher taxes to fund Social Security. He supported bailing out big banks during the financial crisis. He supports the use of behavioral economics to help bureaucrats more effectively control the choices that Americans make. He has even advocated the creation of a GSE modeled after Fannie and Freddie to subsidize health care.

In short, Dr. Diamond is an old fashioned, big Government Keynesian. Many of us believe that this is not the economic philosophy the Fed should be embracing at this point in our economic history. Our economy is already suffering from excessive Government debt and misguided regulation. Our financial regulators should be trying to take steps to strengthen our markets rather than replace them with new layers of Government.

For those who say that policy preference should not be considered, I would only point out that the renomination of Dr. Randy Kroszner to the Fed was blocked by the majority of the Democratic Party because he was viewed as being too free market. Unlike Dr. Diamond, Dr. Kroszner is an expert in monetary policy and banking regulation. Yet, the majority party never even gave him a hearing. Why? Because they agreed that the policy preference of Fed nominees do matter.

Although Dr. Diamond is a skilled and accomplished theoretical economist, it is clear to many of us that he does not possess the appropriate background, experience, or policy preferences to serve on the Board of Governors.

Dr. Diamond may be a talented economic theorist and he may be very well suited for a number of positions in the Administration, but I do not believe he is the best person for this position at this time at the Federal Reserve.

Therefore, before I conclude, let me address the issue of Dr. Diamond's Nobel Prize. Unquestionably, the Nobel is a major honor. Yet being a Nobel recipient does not mean one is qualified for every conceivable position. Any private sector human resource manager would likely say that Dr. Diamond would not be a good selection for a CEO of a large bank. The skills needed to win the Nobel Prize are simply not the same as those required to manage a large financial institution. The same is true here. The skills needed to win the Nobel are not necessarily the same as those needed to be a good Fed Governor. I seriously doubt that many of Dr. Diamond's supporters would have favored the appointment of Milton Friedman or Myron Scholes to the Fed simply because they won the Nobel Prize.

Finally, I am compelled to again point out that Dr. Diamond is legally not eligible to serve. According to Section 10 of the Federal Reserve Act, no two members of the Board of Governors can come from the same Fed district. Once again, Dr. Diamond's nomination papers indicate he is, quote, "of Massachusetts." Current Board member Daniel Tarullo's nomination papers also indicated he was, quote, "of Massachusetts." Dr. Diamond and Dr. Tarullo cannot serve at the same time and comply with Section 10 of the Federal Reserve Act. We can debate the wisdom and historical application of this requirement at a later date, but for now, it is the law, even if prior Congresses have chosen to look the other way.

There are plenty of good nominees that could be selected from historically overlooked districts, like the Cleveland and Minneapolis Districts. In fact, there has not been a Fed Governor from the Cleveland District in 65 years. I would think that some of my friends from Ohio might find that a bit concerning.

Mr. Chairman, I encouraged the President to withdraw this nomination and look beyond the Boston-to-DC corridor for a new nominee. Thank you.

Chairman JOHNSON. Senator Reed.

STATEMENT OF SENATOR JACK REED

Senator REED. Well, Mr. Chairman, thank you very much. We have three extremely qualified nominees that are before us today. I think both Dr. Abraham and Dr. Shapiro have demonstrated a remarkable record, and we can get into some of the details of the issues and policies.

Dr. Diamond, I think, is also superbly qualified, and I think that despite the Ranking Member's comments, I think there is, I would say, a misperception of the role of the Board of Governors of the Federal Reserve. No one Governor is a supervisor, as, for example, the OCC Director or the Chairperson of the Securities and Exchange Commission, with the exception of perhaps Chairman Bernanke.

But what the Federal Reserve can do collectively is to engage in vigorous debate, and that debate, I think, is enhanced by having individuals of Dr. Peter Diamond's ability and perspective. One of the critiques, I think, looking back over the last several years, is a certain group-think at the Federal Reserve about many different policies. I think Dr. Diamond's nomination, and I hope confirmation, to the Federal Reserve will provide an interesting perspective from a very gifted individual that might challenge some of the orthodoxies within the Fed, that might force the individual members of the Fed from different sort of economic perspectives to ask fundamental questions and re-ask the questions, and in that sense, I think he will be a very, very valuable contributor to the Federal Reserve Board.

The issue of the legal status is something that I think we can address and will address. I am hopeful that that is an issue that has already been successfully decided by the Administration.

But I find it just interesting to note that if there is a general criticism of the role of the Federal Reserve and then the suggestion is, find people just like the people we have had on the Federal Reserve for the last 10 years, it seems to me to be inconsistent and I would hope that we would support and confirm Dr. Diamond.

Chairman JOHNSON. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman. If I could pass for now, I would like to follow up in a few minutes. Thank you.

Chairman JOHNSON. Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman. I think we have three excellent and very well qualified individuals before us today and I am certainly looking forward to the questions and their testimony. Thank you.

Chairman JOHNSON. Before we begin opening statements, I ask all nominees to stand and raise your right hand for the swearing in.

Do you swear or affirm that the testimony that you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Ms. ABRAHAM. I do.

Mr. SHAPIRO. I do.

Mr. DIAMOND. I do.

Chairman JOHNSON. Do you agree to appear and testify before any duly constituted Committee of the Senate?

Ms. ABRAHAM. I do.

Mr. SHAPIRO. I do.

Mr. DIAMOND. I do.

Chairman JOHNSON. Please be assured that your written statement will be part of the record, so if you could confine your remarks to 5- to 8-minutes, that would be greatly appreciated. Please note, also, that Members of the Committee may submit written questions to you for the record and you need to respond to these questions promptly in order that the Committee may proceed with your nomination.

I invite all witnesses to introduce their family and friends in attendance before beginning your statement. Ms. Abraham.

Ms. ABRAHAM. Thank you. I do have some people I would like to introduce. I will start with my wonderful husband of 25 years, Graham Horkley. My mother, Roberta Abraham, who has been throughout my life a source of encouragement and support. My brother, David, his wife, Carol, and their two children, William and Allison. My sister, Sarah. My childhood friends from Iowa, Patricia Behneke [phonetic] and Ann Peterson [phonetic], and Patty's daughter, Laura.

I, believe it or not, have more relatives who would have liked to be here today and could not. My father, William Abraham, could not travel to be here. My brother, John, my sister, Molly, and my two college-age sons, who I hope are hard at work on their classwork. Thank you.

Chairman JOHNSON. Thank you, Ms. Abraham.

Mr. Shapiro.

Mr. SHAPIRO. Thank you. I am really pleased that my parents are here, Sherman and Ellen Shapiro, sitting in the front row. And behind them, my children, my daughter, Eva, and my son, Benjamin, were able to come, as well, from California. My partner and best friend, Marti Hearst, is sitting next to Eva here, as well. And I have support from my recent colleagues at the Justice Department, Christine Varney, who is the Assistant Attorney General for Antitrust, Gene Kimmelman, Sharis Pozen, Janet Fikow [phonetic], and Joe Matelis are all from the Antitrust Division. I really appreciate it. And some older friends, Steve Salat [phonetic], Joe Farrow [phonetic], and Dewey Graham [phonetic] are here, as well.

Chairman JOHNSON. Ms. Abraham and Mr. Shapiro, would you be seated. And last, but not least, Dr. Diamond.

Mr. DIAMOND. Thank you, Mr. Chairman. I am traveling very light, compared to the others.

[Laughter.]

Chairman JOHNSON. After two tries.

Mr. DIAMOND. My wife, Kate, is here. My son, Matt, and my cousin, Burcu Duygan-Bump. Thank you.

Chairman JOHNSON. Thank you.

Ms. Abraham, proceed with your statement.

STATEMENT OF KATHARINE G. ABRAHAM, OF IOWA, NOMINATED TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS

Ms. ABRAHAM. Thank you, Chairman Johnson, Ranking Member Shelby, distinguished Members of the Committee. I am pleased and honored to appear before you today as a nominee to be a member of the President's Council of Economic Advisers.

Mr. Johnson has already given some of my background. I am currently a professor at the University of Maryland. From 1993 to 2001, I served as Commissioner of Labor Statistics in the Department of Labor, where I was responsible for many of the key economic indicators produced by the Federal Government. Prior to that, I held faculty positions at the University of Maryland in the Department of Economics and the Sloan School of Management at MIT.

I fell in love with economics as a freshman in college and I have not stopped being in love with economics. What drew me to economics is the power that I believe economic analysis has to inform the policy process and contribute to better outcomes for society.

Something I have also come to appreciate is that economic analysis can only be as good as the data on which it rests. That is something that I came particularly to appreciate during my 8 years as Commissioner of Labor Statistics, and I have maintained a continuing interest in the quality of our economic data and the ways in which they might be improved.

My research and writing have examined a variety of labor market policy issues and relevant economic data on employment, unemployment, inflation, wages, and national output. It is my hope that, if confirmed, my expertise can be useful for interpreting the new data about our economy that will become available over the coming months and years and for assessing their implications for important policy decisions.

As has already been alluded to, these continue to be extraordinary times for our economy. Following the worst macroeconomic shock experienced in a generation, the economy is beginning to recover, but for too many Americans, things are still far from being back to normal. Looking to the future, we know, I think, that investments in physical, human, and knowledge capital will be essential to ensuring our Nation's long-term prosperity.

Should I be confirmed, I look forward to working with other members of the Administration and with this Committee to provide economic insights and analysis that will help with the formulation of policies conducive to broadly shared growth.

Thank you very much. I will, of course, be happy to answer any questions that you or Members of the Committee might wish to pose.

Chairman JOHNSON. Thank you, Ms. Abraham.

Mr. Shapiro.

STATEMENT OF CARL SHAPIRO, OF CALIFORNIA, NOMINATED TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS

Mr. SHAPIRO. Thank you, Chairman Johnson, Ranking Member Shelby, and other Members of the Committee. I am pleased and honored to appear before you today as a nominee to serve as a member of the President's Council of Economic Advisers.

I already introduced you to my family, but I would like to pause for a moment to especially note my father, Sherman, sitting right here behind me. He grew up terribly poor in the Great Depression. Through hard work and tremendous dedication to improving himself, he was able to earn a Ph.D. in economics at the University of Chicago. He had tremendous influence on me, always has. He taught me the virtues of giving all Americans the opportunity to make the most of themselves while always, always, stressing the importance of personal responsibility.

I was born in Austin, Texas, grew up in South Bend, Indiana, and Wilmette, Illinois, and went to school at MIT, and you have described some of my other schooling and qualifications. I was a professor at Princeton for 10 years during the 1980s. I have been a professor at Berkeley for about 20 years.

But during the mid-1990s, I came to Washington to serve as the Chief Economist in the Antitrust Division. My interests have always gone toward public policy and applying the economics for public policy. And then I returned 2 years ago, again as Chief Economist in the Antitrust Division, working with Christine Varney, who is here, as well, the Assistant Attorney General for Antitrust. In that role, my job has been to supervise the economists and give the very best economic analysis and advice to the Assistant Attorney General in support of antitrust enforcement.

My research, consulting, and public service have consistently emphasized the importance of promoting competition and innovation as drivers of economic growth. I have a special interest and expertise in the economics of high-tech industries, intellectual property, some of the other drivers of innovation. My book with Hal Varian, "Information Rules: A Strategic Guide to the Network Economy", which applies economic principles to the information economy, has been widely read by managers and adopted for classroom use. So I have a business side, if you will, consulting and teaching MBAs, as reflected in that book, as well as my public policy side of my background.

If I am confirmed as a member of the CEA, I hope to contribute my expertise to the development of policies that promote economic growth by creating a business environment that encourages private sector innovation and investment.

The CEA has a great tradition, going back 65 years, of providing high-quality, unbiased economic policy advice to the President based on the best thinking and scientific evidence the economics profession has to offer. If I am confirmed, I look forward to continuing that tradition.

Thank you. I would be happy to answer any questions you have for me.

Chairman JOHNSON. Thank you, Mr. Shapiro.

Mr. Peter Diamond.

STATEMENT OF PETER A. DIAMOND, OF MASSACHUSETTS, NOMINATED TO BE A MEMBER OF THE BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

Mr. DIAMOND. Chairman Johnson, Senator Shelby, distinguished Members of the Committee, I am honored to have been nominated by President Obama to be a member of the Board of Governors of the Federal Reserve System and grateful to this Committee for having me here today.

If confirmed, I will work to the best of my abilities to fulfill the responsibilities of this office. Those responsibilities have always been significant. The experience of the recent financial crisis and the ensuing financial reform legislation have underlined the multiple responsibilities of the Fed in working to foster maximum employment and price stability. The Fed has much work ahead in order to implement and fulfill the tasks laid out by the financial reform legislation. I would be honored and pleased to be part of the process of responding to this challenge.

I studied both mathematics and economics as an undergraduate at Yale University. I received my Ph.D. in economics from the Massachusetts Institute of Technology in June 1963. Since then, I have been a faculty member, first at the University of California at Berkeley, and since 1966 at MIT.

Throughout this period, I have taught and done research in economics. My primary focus in both graduate teaching and research has been economic theory, particularly macroeconomics, search theory, and public finance. Within public finance, my primary focus has been on taxes, pensions, and social insurance, particularly Social Security. I have done both theoretical analyses and policy analyses. At the undergraduate level, I have taught microeconomics, macroeconomics, public finance, money and banking, and law and economics. Being a member of two economics departments with great collegial interactions, I have gained wide knowledge in a variety of economics topics, as well as detailed knowledge in my areas of expertise.

A central theme in my research career has been how the economy deals with risks, both risks at the individual level and risks that affect the entire economy. I have thought extensively and written about the risks in the economy and how markets and Government can combine to make the economy function better.

In particular, the research that led to my being a corecipient of the Nobel Prize in Economic Sciences has addressed how the costs and delays in learning about market opportunities affect the workings of the economy. As noted by the Prize Committee, the basic research on this topic has been used as a starting place for applied research in a wide variety of areas, not only the housing and labor markets, where sizable delays are clearly visible, but also in monetary theory and finance economics. Indeed, the varying speeds with which surprises occur to financial firms and their abilities to respond is a central element in the development of financial crises, making search theory an important part of understanding how to avoid and limit future shocks to the financial system.

In sum, I believe my background would prove very helpful at the Federal Reserve, particularly as a part of the process of addressing our heightened awareness of the dangers of systemic risks.

If confirmed, I would welcome the opportunity to help address the important issues that have been raised by the financial crisis as well as the longstanding issues and concerns in monetary policy and bank regulation that the Federal Reserve faces.

Thank you again for holding today's hearings. I would be pleased to answer your questions.

Chairman JOHNSON. Thank you, Mr. Diamond.

Would the Clerk put on the clock 5 minutes.

Mr. Diamond, an article in the *Boston Globe* stated that colleagues have said that your work changed the way economists think about national debt, taxes, risk, unemployment, and Social Security. What insight on these issues, particularly unemployment, can you bring to the Federal Reserve Board of Governors as it sets its economic and regulatory policy?

Mr. DIAMOND. Thank you, Mr. Chairman, for the question. The way we teach about markets at the start of economics is demand and supply and a price clears the market. But if you look at the labor market, at any point in time, there are unemployed workers and there are vacancies. So that picture of the stocks of unemployment and vacancies is an inadequate basis for thinking about the dynamic process of how the economy goes into a recession and how it comes out and the role of policy, both unemployment insurance to help the workers affected and macro policy generally.

The picture that comes when you look at the flows shows over the last 20 years, in an average month, six million workers gain employment and a slightly smaller number lose employment. The impact on unemployment is the difference between two large numbers. So focusing on the flows, focusing on the way that firms find it profitable to seek and hire new workers and to decide which workers they want to hire and focusing on how workers decide where to look for jobs, what kinds of jobs to look at, these are the central elements in thinking about the dynamic process.

The monetary policy followed by the Fed influences this process, and conversely, studying this process is essential for understanding the state of the economy, the risks of inflation, and how to impact the unemployment that is going on. This attention to the risks of the economy as a whole, is very important for going ahead from this terrible crisis we have had and are still definitely not out of.

Chairman JOHNSON. Mr. Shapiro and Ms. Abraham, a question for you both. I believe key investments in innovation, education, and infrastructure will strengthen our competitiveness globally. While Congress debates budget and prioritizes spending, how important is it that we use a scalpel to make targeted budget cuts to ensure that we protect those needed investments? Ms. Abraham?

Ms. ABRAHAM. I think that it is very important. I think that we can all agree that we need to be looking hard at spending. We need to be looking at ways to bring down the deficit. But at the same time, we would be harming our future if we were not making—continuing to make needed investments in the areas that you have identified. Education, innovation, and infrastructure are critical to our future.

Chairman JOHNSON. Mr. Shapiro, do you have any thoughts?

Mr. SHAPIRO. Yes, along similar lines. I think particularly investments in basic research and promoting basic research is something we cannot really count on the private sector to do, and so there is an important role for the Government there, after which we then turn it over to the private sector to commercialize and build the jobs based on that innovation. We have decades of successful experience in that, and so that is an example of an area where a meat axe would be unwise. A scalpel is the way to go.

Chairman JOHNSON. Mr. Diamond, since the downturn in the economy, the Fed has managed to keep inflation in check, but too many Americans remain out of work. Can more be done to create jobs? What is your view of the Federal Reserve's actions so far in promoting the recovery?

Mr. DIAMOND. The traditional tool used by the Federal Reserve is the short-term interest rate. By lowering short-term interest rates, they encourage consumers to spend, particularly on consumer durables. Second, that encourages businesses to invest because it will be cheaper to do it. And third, there is the general sense of the economy moving forward because critical to business is the projection of the ability to sell things out in the future.

Currently, and for an extended period, we have had a short-term interest rate that cannot be lowered any more. So the Fed has had to address how to lower long-term interest rates that matter for these same phenomena and how to do that in a way that will encourage both consumption and investment. The action that the Fed has taken in the asset markets, purchasing assets to help bring down interest rates to encourage more consumption and more investment, seems to me to have been an appropriate way to go, although obviously not being part of the FOMC, I was not part of the explicit discussions and the working out of details.

Chairman JOHNSON. Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman.

Dr. Abraham, the headline number from last week's jobs report was that total unemployment for February was 8.9 percent. An alternative measure of unemployment contained in the report, which includes people who have stopped looking for work or who cannot find full-time jobs, stood at 15.9 percent. Dr. Abraham, as the former Commissioner of Labor Statistics in the Department of Labor, what do you think is the best indicator of labor under-utilization? In other words, is the unemployment rate closer to 9 percent or is it closer to 16 percent?

Ms. ABRAHAM. Hmm. I appreciate your interest, Mr. Shelby, in these economic data. That is a hard question to answer. They——

Senator SHELBY. But we need to try to put our hands around it, do we not?

Ms. ABRAHAM. I think—I guess that what I——

Senator SHELBY. Because we are looking for the truth, are we not?

Ms. ABRAHAM. Oh, absolutely. I guess that what I would say is that from my perspective, the most important use of these data is to tell us about how we are doing today compared to how we were doing in the past, to look at whether things are getting better or things are getting worse. And a comment about those numbers is that they do tend to go up and down together. Whether you look at the narrower unemployment rate or the broader unemployment rate, they both are telling us that things are not good now.

Senator SHELBY. You do not dispute those numbers——

Ms. ABRAHAM. Oh, no. No, no, no, no——

Senator SHELBY. Either the 8.9 or the 15.9?

Ms. ABRAHAM. No.

Senator SHELBY. OK.

Ms. ABRAHAM. They are measuring different things and——

Senator SHELBY. They are metrics that you are familiar with.

Ms. ABRAHAM. And the conclusion, the main conclusion I take from them is that we are not in a good place right now.

Senator SHELBY. And what does that mean——

Ms. ABRAHAM. That——

Senator SHELBY. ——to us up here and to the American people?

Ms. ABRAHAM. I think it means that we need to be thinking hard about how to create more jobs.

Senator SHELBY. To build support for the Obama administration's stimulus bill, the CEA—you were not there, I understand that—created an estimate of the number of, quote, "jobs saved" by the bill—jobs saved. A number of well-respected economists have criticized the so-called "jobs saved" estimate as being nonmeasurable. For example, Dr. Allan Meltzer said, and I will quote, "The Council of Economic Advisers shamefully invented a number called jobs saved that has never been seen before, has no agreed meaning, and no academic standing." What is your professional opinion about the accuracy and validity of the CEA's "jobs saved" estimate?

Ms. ABRAHAM. Well, I think that the estimate was an attempt to answer a really important question, which is how much difference did the Recovery Act make to the employment that we saw compared to what we would have had without it. Answering that kind of question is hard and there are a lot of uncertainties around the number, so I would not want to pin my hat on a specific number. But I do think that the estimate is pretty comparable to what other analysts, private sector analysts looking at the effects of the stimulus have come up with, and I am convinced that the Recovery Act had a significant and positive effect on employment, though I agree it is hard to quantify.

Senator SHELBY. Do you believe that it is appropriate for the Council of Economic Advisers to create highly speculative statistics that perhaps are designed solely to support an Administration's political agenda, be it this one or a Republican, whatever? In other words, is that not——

Ms. ABRAHAM. You are asking an important question about the role of the CEA——

Senator SHELBY. Sure.

Ms. ABRAHAM. ——and I think that the, from my perspective, the role of the CEA is to provide the best information possible to inform policy formation and the evaluation of policy. With something like this, it is very hard to come up with a precise number, but I think it is quite appropriate to try to produce the best number possible as an input into discussion of the policies that were adopted.

Senator SHELBY. Would you agree, though, that basic economic policy should not be based on speculation, should be based on hard numbers?

Ms. ABRAHAM. The economic policy should be based on the best numbers possible.

Senator SHELBY. That is right, harder numbers.

Ms. ABRAHAM. And in some cases, coming up with something that is a precise estimate is going to be impossible, and in that case, I think you do the best job you can.

Senator SHELBY. Dr. Shapiro, I have a question for you, if I could. In your role as the Deputy Assistant Attorney General, you recently submitted a Department of Justice letter on a proposed CFTC rule regarding ownership limitations and governance requirements for swap clearinghouses. Your letter has received harsh criticism from academic economists and market participants. For example, one economist said that the Department of Justice letter treats safety and soundness concerns, quote, "dismissively, cavalierly, and superficially." Those are harsh words.

Explain how your proposed ownership limitations and governance requirements will affect the incentive of owners to run well-managed and well-capitalized clearinghouses.

Mr. SHAPIRO. I would be happy to. The Antitrust Division takes a competition perspective and we were here attempting to explain, to give advice to the CFTC and the SEC regarding how some of the provisions of the Dodd-Frank Act could, indeed, promote competition in some of these areas, particularly for the exchanges.

Senator SHELBY. Mm-hmm.

Mr. SHAPIRO. So in terms of the question about the difference between—about safety and soundness, we were much more cautious about clearinghouses versus exchanges in terms of the natural monopoly elements, and I think that is reflected in the statute. There were certainly some criticisms of what we put in, but there were also quite a lot of support. It is quite a controversial area.

Senator SHELBY. Do you disagree that what one economist said, it treats safety and soundness concerns, again, dismissively, cavalierly, and superficially?

Mr. SHAPIRO. I strongly disagree with that, and I guess that was what I was attempting to convey in my previous answer, which is the safety and soundness concerns, I think, are critical in the setting up of a centralized clearinghouse, which was something that was a problem that was missing in these derivatives areas that contributed to the financial crisis. And the Treasury and the CFTC and the SEC are all working together following the Dodd-Frank to improve safety and soundness by having the clearinghouses set up and have a lot of the trading go through the clearinghouses.

We were, therefore, though, saying much more—took a lighter hand in terms of promoting competition in clearinghouses because the safety and soundness issues are very important. They are less of an——

Senator SHELBY. Very, very, important.

Mr. SHAPIRO. Extremely important, and the risks are not as great for the exchanges as they are for the clearinghouse itself.

Senator SHELBY. Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Reed.

Senator REED. Thank you very much, Mr. Chairman.

Dr. Diamond, you have done over the course of your career research in a number of different very critical areas—taxation, public debt, Social Security, market dynamics, *et cetera.* And again, I think, personally, that this will be a tremendous asset on the Board of Governors because of the various perspectives you can bring.

Can you give just a brief response to the two areas which I think are of increasing importance. One is how do we increase employment opportunities, and second, how do we anticipate concentration of risk, you know, the bubble phenomenon that we saw manifested over the last several years?

Mr. DIAMOND. OK. Thank you, Senator. On creating more jobs, I think we have the familiar money and fiscal policy elements. We got a stimulus package on the tax cut and spending side passed by the Congress in December, and I think that is a package that will help with this process. Beyond that, trying to lower the longer-term interest rates to encourage both consumption and investment is the way to go. The recovery has been slow. The unemployment rate has come down very slowly and I think it is quite important to go forward as quickly as we can.

We know that part of the slow-down process is happening through the credit markets, that there are a number of small banks that are not in very strong shape, and as such, are somewhat limited in their abilities to lend. The role of small banks is very important, particularly for small business. So as those banks get stronger, as the supervision encourages them to do sound lending, that should be a help. And we also know that with small businesses, often, startup capital, new businesses, comes by drawing on home equity wealth, both individual and friends and family who are pitching in to help. So I think as the housing market gets sorted out, I think that should help, as well.

I think there is no single tool, no magic bullet. I think we have to work on all of these pieces.

I am sorry, the second question?

Senator REED. The second question is that one of the expectations now is that the Federal Reserve will be much more sensitive to growing accumulations of risk, bubbles, areas of economic activity that could present another rapid sort of breakdown as we witnessed.

Mr. DIAMOND. I think it is useful here to separate out two pieces. One is the issue of bubbles, which you have mentioned. And then the second is the way the creation of a bubble itself will often lead to misallocation of capital. But it is the bursting of the bubble that will often ripple through the financial system and cause great harm, as happened this time.

So these are two separate issues. I think the attention to bubbles is inherently difficult. Nobody flies a flag and says, "hey, we have got a bubble." There are people who think we have got a bubble and people who think fundamentals have changed. I think it is always probabilistic. One forms in a judgment of how likely something is a bubble or not. I think monetary policy is a very blunt tool that affects a lot of the economy, so I think we need to focus in terms of bubbles on the kinds of tools that will address them directly, particularly in terms of what the Fed does, making sure the lenders are applying good standards to the loans to make it less likely that the loans are only being taken out because there is a hope of making money out of a bubble.

In terms of what happens afterwards, I think that is where the issue of how the economy generally responds to risks, shares risks, spreads risks, when derivatives help in sharing risks and spreading them more widely and more efficiently, and when, as we have seen some examples of, derivatives add to risks. And I think we need to be alert to both the extent to which different financial institutions are holding very similar portfolios, and so subject to much more widespread systemic impact from a bubble bursting, and the connections across financial institutions, the functioning of capital markets and finance markets.

So I think it is getting a better understanding of the risk spreading, the successful part, and the risk concentration, the unsuccessful part, which is very important going forward on dealing with these risks. We know there is a long history of centuries of bubbles. Everyone learned a lot from this one. That does not mean we will never see one again.

Senator REED. Thank you. My time has expired, but I will try to get back, Mr. Chairman, because I have to go to Armed Services, but I just want to commend Dr. Abraham on her work on work share, which is an important program, and I would like to follow up, if I could, in questions, either written or oral. Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman.

Some questions for Dr. Diamond. I will start by suggesting that I sometimes wonder how much we learned from the recent bubbles, and given the current policy, I worry about whether we are not in the process of creating new ones.

My first question is, is it your view that QE2 constitutes monetizing a portion of our budget deficit?

Mr. DIAMOND. No, it does not, because the holding of these assets is viewed as a temporary phenomenon by the Fed. The announcement by the FOMC viewed this as a temporary stimulus, just as doing things at the short end is addressing stimulus or the need to pull back on stimulus, if we were worried about inflation. And the portfolio goes up and down, and I think it should be thought of in that context, that this is not monetizing the debt. This is a temporary position that will get unwound when the circumstances are appropriate.

Senator TOOMEY. Yes, we hope that that is going to happen and it is going to happen well, but I am not so convinced, and I think when the Fed, indirectly through bank intermediaries, nevertheless directly is effectively purchasing the debt that we are issuing on a massive scale, something on the order of two-thirds of the deficit that we are running this year, it certainly looks a lot like monetizing it to me.

The other thing that concerns me is the range of sort of conventional measures and approaches to monetary policy that suggest that what we have now is a very unusually accommodative, and I would fear maybe dangerous accommodative, policy. The Taylor Rule would call for a Fed funds rate of about 1 percent right now. We have commodity prices that are almost uniformly at very high levels. I mean, really, precious metals, other metals, agricultural commodities, across the board, commodities are all at very high levels, many at record high levels. We have money supply by some measures as growing very rapidly. We have negative real interest rates.

You know, you look at all of these indices and they suggest generally that our policy is too accommodative, but yet we are pursuing this huge infusion of cash. Do you not worry that maybe some—that maybe we are going down the wrong path here, that with all of these indications that we could very well have problems in the future, maybe not so distant future, that this is a dangerous policy to pursue?

Mr. DIAMOND. First of all, the issue you raised is critically important. You asked, do I worry, and the answer is yes. I think it is terribly important for these policies to be reviewed and reviewed repeatedly, and I have thought of them as an outsider and I am sure the FOMC is weighing up these issues as well.

The critical question to my mind is, where are we now relative to unemployment and inflation? Inflation is exceedingly low, below the normal 2 percent that people talk about, and——

Senator TOOMEY. But——

Mr. DIAMOND. ——unemployment is very high, and the issue is, are there signs that inflation might be picking up quickly. I view the rise in commodity prices as driven by microfactors, not general stimulation of the economy. We obviously have oil disruptions in the Middle East——

Senator TOOMEY. But before the oil—well, we have not actually had supply disruptions. We have had major political turmoil that gives rise to worries about potential supply disruption——

Mr. DIAMOND. Right.

Senator TOOMEY. ——but we have not had supply disruptions. It seems unlikely to me that micro incidents would occur across the entire range of commodities, everything from corn and wheat and cotton to gold and silver and aluminum. You know, this strikes me as something broader than specific narrow micro effects.

Mr. DIAMOND. Well, let me continue with my list of the things that have happened that really matter for some of these prices. We have had some serious droughts that are affecting a range of agricultural products.

We have a number of large economies, of which China is the obvious leader, that are growing very rapidly and boosting demand across the board for all the inputs into the production and construction that they do. So that China is growing rapidly is something that will affect prices around the world. It is not part of a large stimulus, and at some point, the Chinese have to address the risk of their economy overheating, but I do not know that that will trigger our economy overheating. I do not see that kind of connection.

Senator TOOMEY. Do I have time for one more quick question, Mr. Chairman?

Chairman JOHNSON. One quick question.

Senator TOOMEY. Thank you very much, and the question is about the exit strategy. One of the things that concerns me is that the strategy itself is designed, in part, to raise inflation expectations. About that, I am afraid it will be very successful.

If it is successful in that respect, the obvious response from the market to rising inflation expectation is higher interest rates, higher bond yields. In the face, therefore, of higher bond yields, I fear that the Fed could find itself in the situation where it also has to exit by selling bonds, and I worry that the process of exit could lead to much higher interest rates from the combination of these phenomena. Is that something that you are concerned about, how they can exit?

Mr. DIAMOND. The exit strategy is obviously terribly important, and I think it is important to keep in mind that the Fed has multiple tools. The interest paid on excess reserves can play a critical role in adjusting the way the exit strategy is executed so that we do not get a rapid burst of lending and inflation. I think the combination of tools available will permit a smooth exit. But the great recession we have had is a new experience and I think we are looking at trying to respond to a very major problem and trying to respond to a very high unemployment rate, which is very harmful, and trying to deal with it in a way that does not lay down problems for the future. And I think it is necessarily something that takes close monitoring and following while laying out a plan and monitoring it and changing it, as needed.

Senator TOOMEY. Thank you very much, Mr. Chairman, for your indulgence on the time, and thank you.

Chairman JOHNSON. Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

Dr. Abraham, we have been talking about unemployment numbers and I wanted to raise a particularly concerning labor market issue that I have been watching closely, and that is the unemployment numbers for our returning veterans in Afghanistan and Iraq. They are unacceptably high. Last Friday, the Bureau of Labor Statistics released the February unemployment numbers that showed unemployment for these returning service members to be about 12.5 percent, and that is almost 4 percentage points higher than the national average.

I am always looking for additional ways to help our returning soldiers, and my question is, do you have any insights on why this number might be so high versus the rest of the employment figures?

Ms. ABRAHAM. Thank you for that question. I also have been looking at these numbers. It has not been very long that we have actually had regular unemployment figures for veterans and so it is welcome that we have them now. I have—I cannot really say why they are so much higher than for the population as a whole. The veterans have demographic characteristics that are associated with somewhat higher unemployment. They are young men. Young men tend to have higher unemployment rates. But it is more than that and I think this bears looking into.

Senator HAGAN. Thank you. I look forward to working with you on that issue. And how long have we been keeping numbers on returning veterans?

Ms. ABRAHAM. It has been a few years now.

Senator HAGAN. OK. Dr. Shapiro, America's small businesses are an essential component of economic growth and these businesses create a disproportionate share of the net new jobs, the small businesses. In North Carolina, these small businesses account for nearly 50 percent of our private sector jobs. But right now, these companies are having a very difficult time accessing credit and the capital markets. I hear this everywhere I go throughout my State. And the economic report of the President showed that small businesses receive 90 percent of their financing from banks, community banks, in particular, and the report cites information asymmetries and other market frictions as an impediment to small business financing.

Last year, we passed the Small Business Jobs Act that would help accelerate a return to lending to small businesses, but as I hear over and over again, that small companies are really having a hard time accessing these funds. What steps do you suggest that Congress takes or the Administration takes to restore the flow of credit to small business? What can we do on a proactive basis?

Mr. SHAPIRO. Well, I think your State is not alone in the small business having a difficult time, both with credit, and the report concerns about poor sales is the fundamental issue, that the demand is not there and that, of course, it makes it harder to get a loan. And we have small business association programs that help in this regard and the Administration, with Congress, has pushed those forward.

There is a lending fund to help community banks, OK. So I think this is part of—because community banks are so important for small business and they understand the local situation better, this is some of these informational concerns that a bigger bank might not know. The support for the community banks is very important and there is a lending fund that has been set up for that that seems to be well crafted for that purpose.

There have also been tax cuts that are helping, as well, for small businesses and large businesses that Congress enacted and the President signed last December, particularly to be able to write off more of their investments in 2011.

Senator HAGAN. Well, I know the application for the small business funds that we passed last September is still open for, I think, until the end of March for small and independent community banks to file for that, so I am really looking forward to the change once those funds start getting out into the market, because my small businesses are really hurting. And I do think it is an economic driver, especially from the standpoint of employment opportunities.

Mr. SHAPIRO. Well, I think it is something we need to keep a close eye on and watch, and if I am confirmed, I look forward to doing that with this Committee.

Senator HAGAN. OK. Thank you.

Dr. Diamond, also, thank you for appearing today. I know you have been speaking to this Committee before, but it is my first chance to have an opportunity to be here and to hear from you, so I have just got a couple of questions.

There seems to be a divide among economists about whether the quantitative easing should continue, and some, like the President of the Federal Reserve Bank of Richmond, Jeffrey Lacker, argue that the U.S. growth outlook is tilted against further quantitative easing and that inflation has bottomed and will only head upward from this point. And then others, like Christina Romer, former Chair of the President's Economic Advisers, has advocated for more aggressive quantitative easing, both in size and scope.

With unemployment around 9 percent, 9.8 percent in North Carolina, and core inflation around 1 percent, it would seem inflation expectations are under control for now, but with commodity prices, as we have been discussing, climbing steadily. Do you have concerns that the general inflation could emerge quickly despite continued high unemployment, and what actions would you recommend the Fed to take should such a circumstance emerge?

Mr. DIAMOND. Well, I think you have described the current situation correctly. The inflation rate is very low. Beyond that, the studies of inflation expectations show that inflation expectations are very low. And the primary pusher of inflation historically has been the state of aggregate demand. When the state of aggregate demand gets too big relative to what the economy can produce. Potential output and the labor market in terms of the availability of workers to fill jobs, that is when we get inflation that starts to move seriously. We are obviously in no danger of that process giving us rapid inflation.

On the prices that have boosted, the question at hand is, is this part of an inflationary process or have we had a jump in some prices? Obviously, a drought will leave you a jump in prices, but it does not tell you that the prices are going to keep going up.

The Chinese economy expanding so rapidly is going to push up prices of the inputs they need for their production. The question of how rapidly they will continue growing, and again, will their growth speed up? Will that give us rising inflation? I think there is no reason to think it will grow faster. If anything, I think they are beginning to worry about the possibility of overheating.

So I do not see the link between these individual price problems and a rapid appearance of inflation, given the general state of the labor market and aggregate demand in the U.S.

Senator HAGAN. Thank you, Mr. Chairman.

Chairman JOHNSON. Thank you, Drs. Diamond, Abraham, and Shapiro, for your testimony and for your willingness to serve our Nation.

We are going to submit questions for the record to you by 12 noon this Friday, March 11. Please submit your answers to us as soon as possible so that we can move your nomination in a timely manner.

This hearing is adjourned.

[Whereupon, at 11:11 a.m., the hearing was adjourned.]

[Prepared statements, biographical sketches of nominees, and responses to written questions supplied for the record follow:]

PREPARED STATEMENT OF KATHARINE G. ABRAHAM

TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS

MARCH 8, 2011

Chairman Johnson, Ranking Member Shelby, and distinguished Members of the Committee, I am pleased and honored to appear before you today as a nominee to be a Member of the President's Council of Economic Advisers.

Before I begin, I would like to introduce several people who are with me here today. First is Graham Horkley, my wonderful husband of more than 25 years. Second is my mother Roberta Abraham, who throughout my life has been a source of encouragement and support. I am also very pleased to introduce my brother, David Abraham, his wife, Carol Popolow Abraham, my nephew and niece, William and Allison Abraham, and my sister, Sarah Abraham. My college-age sons, Ian and Ben Horkley, my father, William Abraham, my brother, Jon Abraham, and my sister, Molly Abraham, would very much have liked to be here today, but unfortunately were not able to attend.

I have been Professor of Survey Methodology and Faculty Associate of the Maryland Population Research Center at the University of Maryland since 2002. From 1993 to 2001, I served as Commissioner of Labor Statistics in the Department of Labor, where I was responsible for many of the key economic indicators produced by the Federal Government. Prior to that, I held faculty positions in the Department of Economics, University of Maryland, and the Sloan School of Management, Massachusetts Institute of Technology.

I first became enamored of economics as an undergraduate student. What drew me to economics is the power that economic analysis has to inform the policy process and contribute to better outcomes for our society. Economic analysis can be only as good as the data on which it rests. This is something that I came particularly to appreciate during my 8 years as Commissioner of Labor Statistics and I have maintained a continuing interest in the quality of economic statistics and the ways in which they might be improved.

My research and writing have examined a variety of labor market policy issues and relevant economic data on unemployment, employment, inflation, wages, and national output. It is my hope that, if confirmed, my expertise can be useful for interpreting the new data about our economy that will become available over the coming months and years and for assessing their implications for important policy decisions.

These continue to be extraordinary times for our economy. Following the worst macroeconomic shock experienced in a generation, the economy is beginning to recover, but for too many Americans things are still far from being back to normal. Looking to the future, we know that investments in physical, human, and knowledge capital will be essential to ensuring our Nation's long term prosperity. Should I be confirmed, I look forward to working with the other members of the Administration and with this Committee to provide economic insights and analysis that will help with the formulation of policies conducive to broadly shared growth.

Thank you. I will be happy to answer any questions you or other Members of the Committee may have.

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name:	Abraham	Katharine	Gail
	(Last)	(First)	(Other)

Position to which nominated: Member, Council of Economic Advisers

Date of nomination:

Date of birth: 28 August 1954 (Day) (Month) (Year) **Place of birth:** Dayton, Ohio

Marital Status: Married **Full name of spouse:** Graham Neil Horkley

Name and ages of children:

Ian Robert Horkley, 22

Benjamin William Horkley, 18

Education:

Institution	Dates attended	Degrees received	Dates of degrees
Carleton College	1972-1974	n/a	n/a
Iowa State University	1974-1976	B.S.	1976
Harvard University	1976-1982	Ph.D.	1982

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

Roger Herriot Award for Innovation in Federal Statistics, 2010
Fellow of the Society of Labor Economists, elected 2007
Fellow of the American Statistical Association, elected 2003.
D. Sc., Iowa State University, 2002.
Julius Shiskin Memorial Award for Economic Statistics, 2002.
Distinguished Achievement Citation, Iowa State University Alumni Association, 1999.
American Statistical Association/National Science Foundation/Bureau of Labor Statistics Senior Research Fellow, 1989-1990.
College of Behavioral and Social Sciences Excellence in Teaching Award, 1990.
Outstanding Young Alumnus, Iowa State University, 1988.
National Science Foundation Graduate Fellow, 1977-1980.
Phi Beta Kappa and Phi Kappa Phi, Iowa State University, 1976.

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Office held (if any)	Dates
American Economic Association	Chair, Committee on Government Relations	2009 – present
	Chair, Committee on Economic Statistics	2006-2009
	Vice President	2008-2009
	Board Member, Committee on the Status of Women in the Economics Profession	2005-2008
	Member	Approx. 1978-present
Committee on National Statistics, National Research Council	Member	2004-2010
Board of Overseers, Panel Study of Income Dynamics	Chair	2009-present
	Member	2006-2009
Industrial Relations Rsrch. Assoc.	Board Member	1995-1998
	Member	Approx. 1980-2000
National Bureau of Economic Research	Research Associate	1987-95, 2002-present
	Faculty Research Fellow	1982-87
	Research Analyst	1980-82
Conference on Research in Income and Wealth	Member	1988-93, 2003-present
American Statistical Association	Member	Approx 2000-present
National Association for Business Economics	Member	Approx 2000-present
Woodrow Wilson SHS Parent Teacher Student Association	Treasurer	2007-2009
Alice Deal JHS Parent Teacher Association	Treasurer	2002-2006
Lafayette ES Home and School Association	Treasurer	1996-2000

Employment record: List below all positions held since college, including the title or description of job, name of employment, location of work, and inclusive dates of employment.

2002-	Professor, Joint Program in Survey Methodology; and Faculty Associate, Maryland Population Research Center, University of Maryland
2002	Visiting Professor, Woodrow Wilson School, and Visiting Research Scholar, Department of Economics, Princeton University.
1993-2001	Commissioner, Bureau of Labor Statistics, U.S. Department of Labor.
1991-1997	Professor of Economics, University of Maryland (on leave 1993-1997).
1987-1991	Associate Professor of Economics, University of Maryland.
1985-1988	Research Associate, Brookings Institution.
1987	Guest researcher, Wissenschaftszentrum Berlin fuer Sozialforschung.
1985-1987	Associate Professor of Industrial Relations, Sloan School of Management, MIT (on leave).

1980-1985 Assistant Professor of Industrial Relations, Sloan School of Management, MIT.

Government Experience: List any experience in or direct association with Federal, State, or local governments, including any advisory, consultative, honorary or other part time service or positions.

Member, Committee of Visitors, Division for Social, Behavioral and Economic Sciences, National Science Foundation, September 2010
Member, National Institutes of Health Review Panels, June 2010, June 2009, February 2009 and June 2008
Member, Advisory Committee on Labour and Income Statistics, Statistics Canada, 2003-2007
Reviewed study of Hispanic representation in Federal employment for the Government Accountability Office, 2005-2006.
Member, Social Security Advisory Board Technical Panel on Assumptions and Methods, 2003.
Commissioner, Bureau of Labor Statistics, U.S. Department of Labor, 1993-2001
Prepared report titled The Maryland Human Resource System, with J.C. Haltiwanger, for the Joint Committee on Economic Development of the Maryland legislature, 1989.

Published Writings: List the titles, publishers and dates of books, articles, reports or other published materials you have written.

Please see attached list.

Political Affiliations and activities: List memberships and offices held in and services rendered to all political parties or election committees during the last 10 years.

None.

Political Contributions: Itemize all political contributions of $500 or more to any individual, campaign organization, political party, political action committee or similar entity during the last eight years and identify specific amounts, dates, and names of recipients.

3/16/2004	John Kerry for President Inc.	$500.00
6/8/2004	John Kerry for President Inc.	$500.00
10/1/2004	Democratic National Committee	$600.00
10/19/2004	Democratic National Committee	$600.00
1/27/2008	Obama for America	$600.00
2/27/2008	Obama for America	$600.00

4/30/2008	Obama for America	$1,100.00
9/16/2008	Obama for America	$2,300.00

Qualifications: State fully your qualifications to serve in the position to which you have been named.

My experience and education have prepared me well to serve as a Member of the Council of Economic Advisers. Between 1993 and 2001, I served as Commissioner of the Bureau of Labor Statistics, U.S. Department of Labor, a position in which I was responsible for many of the key economic indicators produced by the Federal government, including the monthly employment and unemployment numbers, the Consumer Price Index, the official productivity statistics, and many others. As a Ph.D. economist, I have also held faculty positions at the Sloan School of Management, Massachusetts Institute of Technology; the Department of Economics, University of Maryland; and the Joint Program in Survey Methodology, University of Maryland. Early in my career, I spent two years as a Research Associate at the Brookings Institution.

My research has examined a variety of issues related to labor market policy. Unemployment has been a continuing interest. Several of my early papers (some co-authored) studied the causes of unemployment and the sources of fluctuations in unemployment, as well as examining the channels through which labor market tightness affects inflation. More recently, I have studied the use of work sharing as an alternative to layoffs and the trend increase in the duration of unemployment through 2000. Both on my own and together with various co-authors, I also have studied firms' employment and compensation policies, authoring and co-authoring a series of papers on the use of flexible staffing arrangements, when firms decide to contract out rather than performing work in-house, how firms respond to changes in the demand for their products, and the role of seniority in pay, promotions and layoffs.

In addition to my research on labor market topics I have written extensively about the measurement of employment, inflation, wages and national output. In several recent papers (all coauthored), for example, I have examined differences between the level and nature of employment as reported in household surveys versus employer surveys. In other papers (some co-authored), I have discussed potential biases in official measures of inflation and more inclusive approaches to the measurement of national output that value nonmarket as well as market production. My familiarity with and expertise concerning important economic statistics will be useful for interpreting the new data about the labor market -- and economic conditions more generally -- that will guide important policy decisions in the coming months and years.

I earned my Ph.D. in Economics from Harvard University in 1982 and my B.S. in Economics from Iowa State University in 1976. In recognition of my professional accomplishments, I was awarded an honorary doctorate by Iowa State University in 2002.

Future employment relationships:

1. Indicate whether you will sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate.

If confirmed by the Senate, I plan to take a two-year leave of absence from the University of Maryland.

2. As far as can be foreseen, state whether you have any plans after completing government service to resume employment, affiliation or practice with your previous employer, business firm, association or organization.

I plan to return to the University of Maryland after completing my government service.

3. Has anybody made you a commitment to a job after you leave government?

No.

4. Do you expect to serve the full term for which you have been appointed?

Yes.

Potential conflicts of interest:

1. Describe any financial arrangements or deferred compensation agreements or other continuing dealings with business associates, clients or customers who will be affected by policies which you will influence in the position to which you have been nominated.

None.

2. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Council of Economic Advisers' designated ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the CEA's ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

3. Describe any business relationship, dealing or financial transaction (other than tax paying) which you have had during the last 10 years with the Federal Government, whether for yourself, on behalf of a client, or acting as an agent, that might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

Please see my response to Potential Conflicts of Interest, question 2, above.

4. List any lobbying activity during the past ten years in which you have engaged in for the purpose of directly or indirectly influencing the passage, defeat or modification of any legislation at the national level of government or affecting the administration and execution of national law or public policy.

In the FY 2009 Federal budget submitted to the Congress, funding for the American Time Use Survey (ATUS) was eliminated. Together with several other scholars, I took part in an effort to persuade Members of Congress that funding for this survey should be continued.

5. Explain how you will resolve any conflict of interest that may be disclosed by your responses to the items above.

Please see my response to Potential Conflicts of Interest, question 2, above.

Civil, criminal and investigatory actions:

1. Give the full details of any civil or criminal proceeding in which you were a defendant or any inquiry or investigation by a Federal, State, or local agency in which you were the subject of the inquiry or investigation.

As the owner, but not the driver, of a vehicle involved in a September 2005 traffic accident, I was named as a defendant in a personal injury lawsuit brought in DC Superior Court. The case went to trial in June 2008 and the jury awarded the plaintiff $4,500. Because this was less than my insurance company had offered prior to trial to settle the lawsuit, under the rules that apply in the District of Columbia, the plaintiff was required to pay defendants' attorney fees and my insurance company paid the plaintiff a net amount of $3,000 to settle the judgment.

2. Give the full details of any proceeding, inquiry or investigation by any professional association including any bar association in which you were the subject of the proceeding, inquiry or investigation.

None.

Addendum: List of publications

A. Books

Labor in the New Economy, edited with J.R. Spletzer and M. Harper, Chicago: University of Chicago Press, 2010.

Beyond the Market: Designing Nonmarket Accounts for the United States, edited with C. Mackie, Washington, D.C.: National Academies Press, 2005.

Job Security in America: Lessons from Germany, with S.N. Houseman, Washington, D.C.: Brookings Institution, 1993.

New Developments in the Labor Market: Toward a New Institutional Paradigm, edited with R.B. McKersie, Cambridge, Massachusetts: MIT Press, 1990.

B. Papers

"Accounting for Investments in Human Capital," Survey of Current Business, June 2010, pp. 42-53.

"Are the New Jobs Good Jobs?" with J.R. Spletzer, in K.G. Abraham, J.R. Spletzer and M. Harper, eds., Labor in the New Economy, Chicago: University of Chicago Press, 2010, pp. 101-143..

"New Evidence on the Returns to Job Skills," with J. Spletzer, Papers and Proceedings of the Hundredth and Twenty First Annual Meeting of the American Economic Association, May 2009, pp. 52-57.

"How Social Processes Distort Measurement: The Impact of Survey Nonresponse on Estimates of Volunteer Work in the United States" with S. Helms and S. Presser, American Journal of Sociology, January 2009, pp. 1129-1165.

"Removing Barriers to Work for Older Americans," with S. Houseman, in T. Bartik and S. Houseman, eds., A Future of Good Jobs, Kalamazoo, MI: Upjohn Institute, 2008, pp. 161-201.

"Health-related Activities in the American Time Use Survey," with L. Russell and Y. Ibuka, Medical Care, July 2007, pp. 680-685.

"Nonresponse in the American Time Use Survey: Who is Missing from the Data and How Much Does It Matter?", with A. Maitland and S. Bianchi, Public Opinion Quarterly, December 2006, pp. 676-703.

"A Framework for Nonmarket Accounting," with C. Mackie, in D. Jorgenson, S. Landefeld and W. Nordhaus, eds., A New Architecture for the U.S. National Accounts, Chicago: University of Chicago Press, 2006, pp. 161-192.

"Financial Aid and Students' College Decisions: Evidence from the District of Columbia Tuition Assistance Grant Program," with M. A. Clark, Journal of Human Resources, Summer 2006, pp. 578-610.

"Work and Retirement Plans among Older Americans," with S.N. Houseman, in R. Clark and O. Mitchell, eds., Re-inventing the Retirement Paradigm, New York and Oxford: Oxford University Press, 2005, pp. 70-91.

"Microdata Access and Labor Market Research: The U.S. Experience," Allgemeines Statistisches Archiv, June 2005, pp. 121-139.

"What We Don't Know Could Hurt Us: Some Reflections on the Measurement of Economic Activity," Journal of Economic Perspectives, Spring 2005, pp. 3-18.

"Meeting Policy-Makers' Information Needs: Lessons from the U.S. Experience," in A. Deaton and V. Kozel, eds., The Great Indian Poverty Debate, Delhi: Macmillan India Ltd., 2005, pp. 27-34.

"Towards a Cost-of-Living Index: Progress and Prospects," Journal of Economic Perspectives, Winter 2003, pp. 45-58.

"Changes in Unemployment Duration and Labor Force Attachment," with R. Shimer, in A.B. Krueger and R.M. Solow, eds., The Roaring Nineties, New York: The Russell Sage Foundation, 2002, pp. 367-420.

"Why Do Different Wage Series Tell Different Stories?" with J. Spletzer and J. Stewart, Papers and Proceedings of the Hundredth and Eleventh Annual Meeting of the American Economic Association, May 1999, pp. 34-39.

"Divergent Trends in Alternative Wage Series," with J. Spletzer and J. Stewart, in J.C. Haltiwanger, M. Manser and R. Topel, eds., Labor Statistics Measurement Issues, Chicago: University of Chicago Press, 1998, pp. 293-325.

"Working to Improve the Consumer Price Index," with J. Greenlees and B. Moulton, Journal of Economic Perspectives, Winter 1998, pp. 27-36.

"A View from the Federal Statistical System," Seventh Annual Frederick V. Waugh Memorial Lecture delivered at the 1997 Meeting of the American Agricultural Economic Association, American Journal of Agricultural Economics, December 1997, pp. 1394-1400.

"Firms' Use of Outside Contractors: Theory and Evidence," with S.K. Taylor, Journal of Labor Economics, July 1996, pp. 394-424.

"Real Wages and the Business Cycle," with J.C. Haltiwanger, Journal of Economic Literature, September 1995, pp. 1215-1264.

"Earnings Inequality in Germany," with S.N. Houseman, in R.B. Freeman and L.F. Katz, eds., Differences and Changes in Wage Structures, Chicago: University of Chicago Press, 1995, pp. 371-403.

"Labor Adjustment Under Different Institutional Structures," with S.N. Houseman, in F. Buttler et al, eds., Institutional Frameworks and Labor Market Performance, London: Routledge, 1995, pp. 285-315.

"Does Employment Protection Inhibit Labor Market Flexibility? Lessons from Germany, France, and Belgium," with S.N. Houseman, in Rebecca M. Blank, ed., Social Protection versus Economic Flexibility, Chicago: University of Chicago Press, 1994, 59-93.

"Female Workers as a Buffer in the Japanese Economy," with S.N. Houseman, Papers and Proceedings of the Hundredth and Fifth Annual Meeting of the American Economic Association, May 1993, pp. 45-51.

"Mismatch and Labour Mobility: Some Final Remarks," in F. Padoa-Schioppa, ed., Mismatch and Labour Mobility, London: Centre for Economic Policy Research, 1991, pp. 453-481.

"Restructuring the Employment Relationship: The Growth of Market-Mediated Work Arrangements," in K.G. Abraham and R.B. McKersie, eds., New Developments in the Labor Market: Toward a New Institutional Paradigm, Cambridge, Massachusetts: MIT Press, 1990, pp. 85-119.

"Job Security and Work Force Adjustment: How Different Are U.S. and Japanese Practices?" with S.N. Houseman, Journal of the Japanese and International Economies, December 1989, pp. 500-521; revised version in C.F. Buechtemann, ed., Employment Security and Labor Market Behavior, Ithaca, New York: ILR Press, 1993, pp. 180-199.

"Returns to Seniority in Union and Nonunion Jobs: A New Look at the Evidence," with H.S. Farber, Industrial and Labor Relations Review, October 1988, pp. 3-19.

"Flexible Staffing Arrangements and Employers' Short-term Adjustment Strategies," in R.A. Hart, ed., Employment, Unemployment and Labour Utilization, London: Unwin Hyman, 1988, pp. 288-311.

"Job Duration, Seniority and Earnings," with H.S. Farber, American Economic Review, June 1987, pp. 278-297.

"Help Wanted Advertising, Job Vacancies and Unemployment," Brookings Papers on Economic Activity, 1987:1, pp. 207-243.

"Employment Security and Employment Adjustment," with S.N. Houseman, Proceedings of the Fortieth Annual Meeting of the Industrial Relations Research Association, December 28-30, 1987, pp. 44-54.

"Cyclical Unemployment: Sectoral Shifts or Aggregate Disturbances?", with L.F. Katz, Journal of Political Economy, June 1986, pp. 507-522.

"Structural/Frictional versus Deficient Demand Unemployment: Reply," American Economic Review, March 1986, pp. 273-276.

"Length of Service and Promotions in Union and Nonunion Work Groups," with J.L. Medoff, Industrial and Labor Relations Review, April 1985, pp. 408-420.

"Length of Service and Layoffs in Union and Nonunion Work Groups," with J.L. Medoff, Industrial and Labor Relations Review, October 1984, pp. 87-97.

"Structural/Frictional versus Deficient Demand Unemployment: Some New Evidence," American Economic Review, September 1983, pp. 708-724.

"Unemployment, Unsatisfied Demand for Labor, and Compensation Growth, 1956-1980," with J.L. Medoff, in M.N. Baily, ed., Workers, Jobs and Inflation, Washington, D.C.: The Brookings Institution, 1982, pp. 49-88.

"Length of Service and the Operation of Internal Labor Markets," with J.L. Medoff, Proceedings of the Thirty-Fifth Annual Meeting of the Industrial Relations Research Association, December 28-30, 1982, pp. 208-318.

"Are Those Paid More Really More Productive?: The Case of Experience," with J.L. Medoff, Journal of Human Resources, Spring 1981, pp. 185-216.

"Experience, Performance and Earnings," with J.L. Medoff, Quarterly Journal of Economics, December 1980, pp. 703-736.

C. Notes, Comments and Reviews

Comment on J. Abowd, et al, "The LEHD Infrastructure Files and the Creation of the Quarterly Workforce Indicators," in Producer Dynamics: New Evidence from Micro Data, T. Dunne, J.B. Jensen and M.J. Roberts, eds., Chicago: University of Chicago Press, 2009, pp. 230-234.

Comment on R. Hall, "Cyclical Movements Along the Labor Supply Function," in Labor Supply in the New Century, Boston: Federal Reserve Bank of Boston, 2008, pp. 265-269.

Comment on J. Abowd, et al, "The Relation among Human Capital, Productivity, and Market Value: Building Up from Micro Evidence," in Measuring Capital in the New Economy, C. Corrado, J. Haltiwanger and D. Sichel, eds., Chicago: University of Chicago Press, 2005, pp. 198-203.

Review of At Home and Abroad: U.S. Labor Market Performance in International Perspective, Francine D. Blau and Lawrence M. Kahn, New York: Russell Sage Foundation, 2002, in Journal of Economic Literature, June 2004, pp. 532-533.

Comment on T. Bewley, "Labor Market Behavior," presented at the Federal Reserve Bank of Boston Conference, "How Humans Behave: The Implications for Economic and Economic Policy," Chatham, Massachusetts, June 8-10, 2003. Available online at http://www.bos.frb.org/economic/conf/conf48/papers/abraham.pdf .

Comment on M. Boskin et al, "The CPI Commission: Findings and Recommendations," and R.J. Gordon and Z. Griliches, "Quality Change and New Products," Papers and Proceedings of the Hundredth and Ninth Annual Meeting of the American Economic Association, May 1997, pp. 94-95.

Comment on M. Boskin, "The CPI Commission," Business Economics, April 1997, pp. 64-67.

Contribution to "Statistics Under the Spotlight: Improving the Consumer Price Index," Proceedings of the Section on Government Statistics, Papers Presented at the Meeting of the American Statistical Association, August 4-8, 1996, pp. 54-56.

Comment on J. Bishop, "Improving Job Matches in the U.S. Labor Market," Brookings Papers on Economic Activity: Microeconomics, 1993:1, pp. 391-396.

Review of A. Weiss, Efficiency Wages: Models of Unemployment, Layoffs and Wage Dispersion, Princeton: Princeton University Press, 1990, in Industrial and Labor Relations Review, January 1993, pp. 420-421.

Comment on P. Sherer and K. Lee, "Cores, Peripheries and More"; J. Rebitzer and T. Kochan, "The Management of Contract Workers and the Risks of Accidents"; and P. Way, "Staffing Strategies," Proceedings of the Forty-Fourth Annual Meeting of the Industrial Relations Research Association, January 3-5, 1992, pp. 340-343.

Review of J.D. Owen, Reduced Working Hours: Cure for Unemployment or Economic Burden, Baltimore: Johns Hopkins University Press, 1989, in Journal of Economic Literature, September 1991, pp. 1199-1201.

Comment on S. Korenman and B. Okun, "Gender Differences in Cyclical Unemployment," in R. Eberts and E. Groshen, eds., Issues in Contemporary Labor Economics and Implications for Public Policy, New York: W.E. Sharpe, 1991, pp. 197-200.

Comment on L.M. Solnick, "Male and Female Quitting: The Case of Professionals and Managers," Proceedings of the Forty-third Annual Meeting of the Industrial Relations Research Association, December 28-30, 1990, pp. 129-131.

Comment on S.J. Davis and J.C. Haltiwanger, "Gross Job Creation and Destruction: Microeconomic Evidence and Macroeconomic Implications," in O. Blanchard and S. Fischer, eds., NBER Macroeconomic Annual, vol. 4, Cambridge, Massachusetts: MIT Press, 1990, pp. 169-177.

Comment on R. Hujer, O. Loewenbein and H. Schneider, "Wages and Unemployment," in H. Koenig, ed., Economics of Wage Determination, Berlin: Springer-Verlag, 1990, pp. 325-327.

Comment on T.M. Smeeding, L. Rainwater and R. Simpson, "Comparative Cross-National Research on Income and Economic Well-Being: The Luxembourg Income Study," Survey of Current Business, March 1989, pp. 67-68.

Comment on L.H. Summers, "Why Is the Unemployment Rate So Very High Near Full Employment?" Brookings Papers on Economic Activity, 1986:2, pp. 384-389.

Comment on D.J.B. Mitchell, "Shifting Norms in Wage Determination" Brookings Papers on Economic Activity, 1985:2, pp. 600-605.

Comments on T.N. Daymont and P.J. Andrisani, "Some Causes and Consequences of Disability Benefit Receipt," and D.R. Williams, "Evidence on the Racial Difference in the Discouraged Worker Effect Among Male Teenagers," Proceedings of the Thirty-Sixth Annual Meeting of the Industrial Relations Research Association, December 28-30, 1983, pp. 207-209.

D. Other

"Short-Time Compensation is a Missing Safety Net for U.S. Economy in Recession," with S.N. Houseman, Employment Research, W.E. Upjohn Institute newsletter, July 2009, p. 3.

"Work and Retirement Plans among Older Americans," with S. N. Houseman, Employment Research, W.E. Upjohn Institute newsletter, October 2004, pp. 1-4.

"An Academic Economist in the Federal Bureaucracy," Newsletter of the Committee on the Status of Women in the Economics Profession, Fall 2004, pp. 4-5.

"Data for Managing Tight Labor Markets: The New Job Openings and Labor Turnover Survey," Chance, Spring 2003, pp. 58-62.

"The State of Our Economic Intelligence: Where We've Been and Where We're Going," speech printed in proceedings of conference on the Employment Act of 1946, Jerome Levy Economics Institute, April 25-26, 1996, pp. 12-17.

"The Consumer Price Index: What Does It Measure?" Challenge, May/June 1995, pp. 59-62.

"Job Security in America: A Better Approach," with S.N. Houseman, Brookings Review, Summer 1993, pp. 34-35.

The Maryland Human Resource System, with J.C. Haltiwanger, report prepared for the Joint Committee on Economic Development of the Maryland legislature, November 1989.

"Too Few Jobs," Washington Post op-ed piece, 1982.

PREPARED STATEMENT OF CARL SHAPIRO

TO BE A MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS

MARCH 8, 2011

Chairman Johnson, Ranking Member Shelby, and Members of the Committee, I am honored to appear before you as a nominee to serve as a Member of the Council of Economic Advisers.

Before I begin, I would like to introduce you to my family. My parents, Sherman and Ellen Shapiro, were able to come from California to be here today. My daughter, Eva, and my son, Benjamin, are also present. My partner and best friend, Marti Hearst, is also here today.

I am especially pleased that my father Sherman can be here today. He grew up terribly poor during the Great Depression. Through hard work and a tremendous dedication to improving himself, he was able to earn a Ph.D. in economics at the University of Chicago. He taught me the virtues of giving all Americans the opportunity to make the most of themselves, while always stressing the importance of personal responsibility.

I was born in Austin, Texas, and grew up in South Bend, Indiana, and Wilmette, Illinois. I went to school at M.I.T., earning my Ph.D. in 1981. I was on the faculty of Princeton University during the 1980s, and have been a Professor at the Haas School of Business and the Department of Economics at the University of California at Berkeley since 1990. I was honored with an endowed chair in 1994; since then I have been the Transamerica Professor of Business Strategy. I served as the Director of the Institute of Business and Economic Research at U.C. Berkeley from 1998 to 2008. During 1995–1996 and again during 2009–2011, I served as chief economist in the Antitrust Division of the Department of Justice, supervising some 50 Ph.D. economists to provide sound economic analysis in support of antitrust enforcement.

My research, consulting, and public service have consistently emphasized the importance of promoting competition and innovation as drivers of economic growth. I have special interest, and expertise, in the economics of innovation and high-tech industries. My book with Hal Varian, "Information Rules: A Strategic Guide to the Network Economy", which applies economic principles to the information economy, has been widely read by managers and adopted for classroom use. If confirmed as a Member of the CEA, I hope to contribute my expertise to the development of policies that promote economic growth by creating a business environment that encourages private sector innovation and investment.

The CEA has a great tradition, going back 65 years, of providing high-quality, unbiased economic policy advice to the President based on the best thinking and scientific evidence the economics profession has to offer. If confirmed, I look forward to continuing that tradition.

Thank you. I would be happy to answer any questions you might have.

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name: Shapiro (Last) Carl (First) (Other)

Position to which nominated: Member, Council of Economic Advisers

Date of nomination: February 24, 2011

Date of birth: March 20, 1955 (Day) (Month) (Year) **Place of birth:** Austin, Texas

Marital Status: Divorced **Full name of spouse:** N/A

Name and ages of children: Eva Shapiro, 24 and Benjamin Shapiro, 21

Education:

Institution	Dates attended	Degrees received	Dates of degrees
MIT	1972-1976	B.S.	1976
Univ. of Calif. Berkeley	1976-77	M.A.	1977
MIT	1977-1980	Ph.D.	1981

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

Transamerica Chair of Business Strategy, Awarded 1994
Fellow, Center for Advanced Study in the Behavioral Sciences, 1989-1990
Research Fellowship, Alfred P. Sloan Society, 1985-1987
Graduate Fellowship, National Science Foundation, 1977-1980
Graduate Fellowship, University of California, 1976-1977
Phi Beta Kappa and Sigma Xi, MIT, 1976

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Office held (if any)	Dates
American Economic Association		
	Member, Program Committee, 2006	
	Advisory Board, Journal of Economic Perspectives, 1999-2002	
	Editor, Journal of Economic Perspectives, 1993-1995	
	Co-Editor, Journal of Economic Perspectives, 1986-1993	

American Bar Association
Antitrust Section, Economic Evidence Task Force, 2005-2006
Antitrust Section, Economics Committee, Vice-Chair, 1995-1998

Industrial Organization Society
President, 1995-1996

Charles River Associates
Member, Board of Directors, 2000-2008

Employment record: List below all positions held since college, including the title or description of job, name of employment, location of work, and inclusive dates of employment.

Deputy Assistant Attorney General for Economics
Antitrust Division, U.S. Department of Justice, 2009 present.

Senior Consultant
Charles River Associates, Oakland, CA, 1998-2009.

Director
Charles River Associates, Boston, MA, 2000-2008.

Senior Economist
The Tilden Group, LLC, Oakland, CA, 1996-1998

Transamerica Professor of Business Strategy
Haas School of Business
University of California at Berkeley, 1994 - present.

Professor of Business and Economics
Haas School of Business and Department of Economics
University of California at Berkeley, 1990 - present.

Director
Institute of Business and Economic Research
University of California at Berkeley, 1998 - 2008.

Deputy Assistant Attorney General for Economics
Antitrust Division, U.S. Department of Justice, 1995 1996.

Chair, Economic Analysis and Policy Group
Haas School of Business
University of California at Berkeley, 1991 - 1993.

Professor of Economics and Public Affairs
Woodrow Wilson School of Public and International Affairs and
Department of Economics, Princeton University, 1987 - 1990.

Research Fellow
Center for Advanced Study in the Behavioral Sciences
Stanford University, 1989 - 1990.

Visiting Scholar
Stanford Law School, Stanford University, 1989 - 1990.

Assistant Professor of Economics and Public Affairs
Woodrow Wilson School of Public and International Affairs and
Department of Economics, Princeton University, 1980 - 1987.

Visiting Fellow
Institute for International Economic Studies, University of Stockholm, 1986.

Visiting Assistant Professor of Economics and Public Policy
Graduate School of Business, Stanford University, 1982 - 1983.

Economist
Bureau of Economics, Federal Trade Commission, Summer 1980

Government Experience: List any experience in or direct association with Federal, State, or local governments, including any advisory, consultative, honorary or other part time service or positions.

Deputy Assistant Attorney General for Economics
Antitrust Division, U.S. Department of Justice, 2009 present.

Member, Market Surveillance Committee, California Independent System Operator, 1997-2000.

Deputy Assistant Attorney General for Economics
Antitrust Division, U.S. Department of Justice, 1995 – 1996.

Member, Defense Science Board Task Force on Antitrust Aspects of Defense Industry Consolidation, U.S. Department of Defense, 1993 - 1994.

Published Writings: List the titles, publishers and dates of books, articles, reports or other published materials you have written.

See attached.

Political Affiliations and activities: List memberships and offices held in and services rendered to all political parties or election committees during the last 10 years.

None.

Political Contributions: Itemize all political contributions of $500 or more to any individual, campaign organization, political party, political action committee or similar entity during the last eight years and identify specific amounts, dates, and names of recipients.

October 2010	Friends of Barbara Boxer, $1000
October 2008	Obama Victory Fund, $10,000
	Democratic Senatorial Campaign Committee, $1000
September 2008	Obama for America, $2300
May 2007	Obama for America, $2300
November 2006	Jerry McNerny for Congress, $1000
October 2006	Democratic Congressional Campaign Committee, $2000
	Joe Donnelley for Congress, $1000
	Bruce Braley for Congress, $1000
	Kenneth Lucas for Congress, $1000
	Christopher Murphy for Congress, $1000
	Gabrielle Giffords for Congress, $500
August 2006	Edwin Perlmutter for Congress, $500
June 2006	Jerry McNerny for Congress, $500
April 2006	Tammy Duckworth for Congress, $500
	Ron Klein for Congress, $500
	Heath Shuler for Congress, $500
March 2006	Francine Busby for Congress, $500
February 2006	Melissa Bean for Congress, $500
December 2005	Lampson Victory Fund, $2000
October 2004	Ohio Democratic Party, $10,000
	Democratic National Committee, $4000
September 2004	Democratic National Committee, $9000
May 2004	Democratic National Committee, $1000
April 2004	John Kerry for President, $1000
February 2004	John Kerry for President, $1000

Qualifications: State fully your qualifications to serve in the position to which you have been named. (attach sheet)

See attachment.

Future employment relationships: 1. Indicate whether you will sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate.

If confirmed by the Senate, I intend to remain on leave from the University of California at Berkeley as a tenured professor. I will resign my position as Deputy Assistant Attorney General for Economics in the Antitrust Division of the Department of Justice.

2. As far as can be foreseen, state whether you have any plans after completing government service to resume employment, affiliation or practice with your previous employer, business firm, association or organization.

After completing government service, I plan to return to my position as a tenured professor at the University of California at Berkeley.

3. Has anybody made you a commitment to a job after you leave government?

No.

4. Do you expect to serve the full term for which you have been appointed?

Yes.

Potential conflicts of interest:

1. Describe any financial arrangements or deferred compensation agreements or other continuing dealings with business associates, clients or customers who will be affected by policies which you will influence in the position to which you have been nominated.

None.

2. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Council of Economic Advisers' designated ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the CEA's ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

3. Describe any business relationship, dealing or financial transaction (other than tax paying) which you have had during the last 10 years with the Federal Government, whether for yourself, on behalf of a client, or acting as an agent, that might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

Please see my response to Potential Conflicts of Interest, question 2, above.

4. List any lobbying activity during the past ten years in which you have engaged in for the purpose of directly or indirectly influencing the passage, defeat or modification of any legislation at the national level of government or affecting the administration and execution of national law or public policy.

I have never been registered as a lobbyist. During the past ten years I have appeared on behalf of clients on specific matters before the Antitrust Division of the Department of Justice, the Federal Communications Commission, and the Federal Trade Commission. I also have testified twice before Congress during the past ten years, once regarding gasoline prices and once regarding the newspaper industry.

5. Explain how you will resolve any conflict of interest that may be disclosed by your responses to the items above.

Please see my response to Potential Conflicts of Interest, question 2, above.

Civil, criminal and investigatory actions:

1. Give the full derails of any civil or criminal proceeding in which you were a defendant or any inquiry or investigation by a Federal, State, or local agency in which you were the subject of the inquiry or investigation.

None.

2. Give the full details of any proceeding, inquiry or investigation by any professional association including any bar association in which you were the subject of the proceeding, inquiry or investigation.

None.

Carl Shapiro: Questionnaire Attachment
Nominee to be member of the Council of Economic Advisers

Published Writings:

Publications

The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years, *Antitrust Law Journal*, 2010.

Injunctions, Hold-Up, and Patent Royalties, *American Law and Economics Review*, 2010.

Economics at the Antitrust Division: 2009-2010, with Ken Heyer, *Review of Industrial Organization,* 2010.

Recapture, Pass-Through, and Market Definition, with Joseph Farrell, *Antitrust Law Journal*, 2010.

Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition, with Joseph Farrell, *BE Journal of Theoretical Economics: Policies and Perspectives*, 2010.

Upward Pricing Pressure in Horizontal Merger Analysis: Reply to Epstein and Rubinfeld, *BE Journal of Theoretical Economics: Policies and Perspectives*, 2010.

Upward Pricing Pressure and Critical Loss Analysis, with Joseph Farrell, *Global Competition Review*, 2010.

Competition Policy in Distressed Industries, in *Competition as Public Policy,* American Bar Association, 2010.

A Tribute to Oliver Williamson: Antitrust Economics, *California Management Review,* 2010.

Updating the Merger Guidelines: Issues for the Upcoming Workshops, Antitrust Division, U.S. Department of Justice, November 2009.

Microsoft: Remedial Failure, *Antitrust Law Journal,* 2009.

How Strong Are Weak Patents? with Joseph Farrell, *American Economic Review,* 2008.

Detecting and Reversing the Decline in Horizontal Merger Enforcement, with Jonathan Baker, *Antitrust*, Summer 2008.

Reinvigorating Horizontal Merger Enforcement, with Jonathan Baker, in *Where the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on Antitrust,* Robert Pitofsky, ed., Oxford University Press, 2008.

Merger to Monopoly to Serve a Single Buyer: Comment, with Jonathan Baker and Joseph Farrell, *Antitrust Law Journal,* 2008.

Improving Critical Loss, with Joseph Farrell, *Antitrust Source,* February 2008.

Patent Reform: Aligning Reward and Contribution, *Innovation Policy and the Economy,* Adam Jaffe, Josh Lerner, and Scott Stern, eds., National Bureau of Economic Research, vol. 8, pp. 111-156, 2007.

Standard Setting, Patents and Hold-Up, with Joseph Farrell, John Hayes and Theresa Sullivan, *Antitrust Law Journal*, 74, 2007.

Antitrust, with Louis Kaplow, in *Handbook of Law and Economics, Volume 2,* A. Mitchell Polinsky & Steven Shavell, eds., Elsevier, pp. 1073-1225, 2007.

Patent Hold-Up and Royalty Stacking, with Mark A. Lemley, *Texas Law Review*, vol. 85, no. 7, pp. 1991-2049, June 2007.

Patent Hold-Up and Royalty Stacking: Reply, with Mark A. Lemley, *Texas Law Review*, vol. 85, no. 7, pp. 2163-2173, June 2007.

Market Definition in Crude Oil: Estimating the Effects of the BP/ARCO Merger, with John Hayes and Robert Town, *Antitrust Bulletin*, Summer 2007.

Prior User Rights, *American Economic Review Papers & Proceedings,* May 2006.

Probabilistic Patents, with Mark A. Lemley, *Journal of Economic Perspectives*, Spring 2005.

Patent System Reform: Economic Analysis and Critique, *Berkeley Technology Law Journal,* vol. 19, no. 3, pp. 1017-1047, 2004.

The Economics of Information Technology, with Hal R. Varian and Joseph Farrell, Cambridge University Press, 2004.

Further Thoughts on Critical Loss, with Michael L. Katz, *Antitrust Source,* March 2004.

Antitrust Limits to Patent Settlements, *Rand Journal of Economics,* vol. 34, no. 2, pp. 391-411, Summer 2003.

Antitrust Analysis of Patent Settlements Between Rivals, *Antitrust Magazine,* pp. 70-77, Summer 2003.

Critical Loss: Let's Tell the Whole Story, with Michael L. Katz, *Antitrust Magazine, pp. 49-56,* Spring 2003.

The FTC's Challenge to Intel's Licensing Practices, in *The Antitrust Revolution: Economics, Competition, and Policy, 4th Edition,* John E. Kwoka, Jr. and Lawrence J. White, eds., Oxford University Press, 2003.

The British Petroleum/ARCO Merger: Alaskan Crude Oil, with Jeremy Bulow, in *The Antitrust Revolution: Economics, Competition, and Policy, 4th Edition,* John E. Kwoka, Jr. and Lawrence J. White, eds., Oxford University Press, 2003.

Antitrust Policy in the Clinton Administration, with Robert E. Litan, in *American Economic Policy in the 1990s*, Jeffrey Frankel and Peter Orszag, eds., Center for Business and Government, John F. Kennedy School of Government, Harvard University, 2002.

Trans-Atlantic Divergence in *GE/Honeywell:* Causes and Lessons, with Donna E. Patterson, *Antitrust Magazine,* Fall 2001.

Scale Economies and Synergies in Horizontal Merger Analysis, with Joseph Farrell, *Antitrust Law Journal*, vol. 68, no. 3, 2001.

Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting, in *Innovation Policy and the Economy*, Adam Jaffe, Joshua Lerner, and Scott Stern, eds., National Bureau of Economic Research, vol. 1, pp. 1190-150, 2000.

Setting Compatibility Standards: Cooperation or Collusion?, in *Expanding the Bounds of Intellectual Property*, Rochelle Dreyfuss, Diane Zimmerman, and Harry First, eds., 2001, Oxford University Press.

Simulating Partial Asset Divestitures to 'Fix' Mergers, with Jith Jayaratne, *International Journal of the Economics of Business*, 2000.

Competition Policy: A Century of Economic and Legal Thinking, with William Kovacic, *Journal of Economic Perspectives*, Winter 2000.

Competition Policy in the Information Economy, in *Competition Policy Analysis*, Einar Hope, ed., 2000, Routledge Studies in the Modern World Economy.

Information Rules: A Strategic Guide to the Network Economy, with Hal R. Varian, Harvard Business School Press, 1999.

Exclusivity in Network Industries, *George Mason Law Review*, Spring 1999.

The Art of Standards Wars, with Hal R. Varian, *California Management Review*, Winter 1999.

Antitrust in Software Markets, with Michael L. Katz, in *Competition, Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace*, Jeffrey A. Eisenbach and Thomas M. Lenard, eds., 1999, Kluwer Academic Publishers.

Versioning: The Smart Way to Sell Information, with Hal R. Varian, *Harvard Business Review*, November-December 1998.

Unilateral Refusals to License Intellectual Property and International Competition Policy, with Richard J. Gilbert, in *Competition and Trade Policies*, Einar Hope and Per Maeleng, eds., 1998, Routledge.

Antitrust Issues in the Licensing of Intellectual Property: The Nine No-No's Meet the Nineties, with Richard J. Gilbert, *Brookings Papers on Economics: Microeconomics*, 1997.

Crown-Jewel Provisions in Merger Consent Decrees, with Michael Sohn, *Antitrust Magazine*, 1997.

Privacy, Self-Regulation, and Antitrust, with Joseph Kattan, in *Privacy and Self-Regulation in the Information Age*, National Telecommunications and Information Administration, U.S. Department of Commerce, 1997.

Antitrust Policy: Towards a Post-Chicago Synthesis, *Jobs & Capital*, Winter 1997.

An Economic Analysis of Unilateral Refusals to License Intellectual Property, with Richard J. Gilbert, *Proceedings of the National Academy of Sciences*, November 12, 1996.

Re-Examining Dominance and Unlawful Exclusion Rules, *Antitrust Conference Report,* The Conference Board, 1996.

Antitrust in Network Industries, Antitrust Division, U.S. Department of Justice, March 1996.

Mergers with Differentiated Products, *Antitrust*, Spring 1996. See also http://www.usdoj.gov/atr/public/speeches/shapiro.spc.htm.

Aftermarkets and Consumer Welfare: Making Sense of *Kodak*, *Antitrust Law Journal*, Spring 1995.

Systems Competition and Network Effects, with Michael L. Katz, *Journal of Economic Perspectives*, Spring 1994.

Systems Competition and Aftermarkets: An Economic Analysis of *Kodak*, with David J. Teece, *Antitrust Bulletin*, Spring 1994.

The Dynamics of Bandwagons, with Joseph Farrell, in *Problems of Coordination in Economic Activity*, James W. Friedman, ed., Kluwer Press, 1993.

Standard Setting in High Definition Television, with Joseph Farrell, *Brookings Papers on Economic Activity: Microeconomics*, 1992.

Product Introduction with Network Externalities, with Michael L. Katz, *Journal of Industrial Economics*, March 1992.

Horizontal Mergers: Reply, with Joseph Farrell, *American Economic Review*, September 1991.

Introduction to Liability Symposium, *Journal of Economic Perspectives*, Summer 1991.

Economic Rationales for the Scope of Privatization, with Robert D. Willig, in *The Political Economy of Public Sector Reform and Privatization*, Ezra N. Suleiman and John Waterbury, eds., Westview Press, San Francisco, CA, 1990.

On the Antitrust Treatment of Production Joint Ventures, with Robert D. Willig, *Journal of Economic Perspectives*, Summer 1990.

Asset Ownership and Market Structure in Oligopoly, with Joseph Farrell, *Rand Journal of Economics*, Summer 1990.

Optimal Patent Length and Breadth, with Richard Gilbert, *Rand Journal of Economics*, Spring 1990.

Horizontal Mergers: An Equilibrium Analysis, with Joseph Farrell, *American Economic Review*, March 1990.

Theories of Oligopoly Behavior, in *The Handbook of Industrial Organization*, R. Schmalensee and R.D. Willig (eds.), 1989.

Market Power and Mergers in Durable Goods Industries: Comment, *Journal of Law and Economics*, 1989

The Theory of Business Strategy, *Rand Journal of Economics*, Spring 1989.

Optimal Contracts with Lock-In, with Joseph Farrell, *American Economic Review*, March 1989.

Dynamic Competition with Switching Costs, with Joseph Farrell, *Rand Journal of Economics*, Spring 1988.

Counterfeit-Product Trade, with Gene. M. Grossman, *American Economic Review*, March 1988.

Foreign Counterfeiting of Status Goods, with Gene. M. Grossman, *Quarterly Journal of Economics*, February 1988.

Dynamic R&D Competition, with Gene M. Grossman, *Economic Journal*, June 1987.

R&D Rivalry with Licensing or Imitation, with Michael L. Katz, *American Economic Review*, June 1987.

Optimal Dynamic R&D Programs, with Gene M. Grossman, *Rand Journal of Economics*, Winter 1986.

Product Compatibility Choice in a Market with Technological Progress, with Michael L. Katz, *Oxford Economic Papers*, Special Issue on the New Industrial Economics, November 1986.

Investment, Moral Hazard, and Occupational Licensing, *Review of Economic Studies*, October 1986.

How to License Intangible Property, with Michael L. Katz, *Quarterly Journal of Economics*, August 1986.

Research Joint Ventures: An Antitrust Analysis, with Gene M. Grossman, *Journal of Law Economics and Organization*, Fall 1986.

Consumer Shopping Behavior in the Retail Coffee Market, with Michael L. Katz, in *Empirical Approaches to Consumer Protection*, Pauline M. Ippolito and David T. Scheffman, eds., Federal Trade Commission, 1986.

Technology Adoption in the Presence of Network Externalities, with Michael L. Katz, *Journal of Political Economy*, August 1986.

Entry Dynamics with Mixed Strategies, with Avinash K. Dixit, in *The Economics of Strategic Planning*, L.G. Thomas, ed., Lexington Press, 1986.

Exchange of Cost Information in Oligopoly, *Review of Economic Studies*, July 1986.

InterLATA Capacity Growth and Market Competition, with Robert D. Willig, in *Telecommunications and Equity: Policy Research Issues*, Proceedings of the Thirteenth Annual Telecommunications Policy Research Conference, James Miller, ed., North Holland, 1986.

Can Unemployment be Involuntary? Reply, with Joseph E. Stiglitz, *American Economic Review*, December 1985.

On the Licensing of Innovations, with Michael L. Katz, *Rand Journal of Economics*, Winter 1985.

Normative Issues Raised by International Trade in Technology Services, with Gene M. Grossman, in *Trade and Investment in Service: Canada/U.S. Perspectives*, R.M. Stern (ed.), Ontario Economic Council, 1985.

Equilibrium Unemployment as a Worker Discipline Device: Reply, with Joseph E. Stiglitz, *American Economic Review*, September 1985.

Advances in Supervision Technology and Economic Welfare: A General Equilibrium Analysis, with Janusz Ordover, *Journal of Public Economics*, December 1984.

The General Motors-Toyota Joint Venture: An Economic Assessment, with Janusz A. Ordover, *Wayne Law Journal*, Summer 1985.

Network Externalities, Competition, and Compatibility, with Michael L. Katz, *American Economic Review*, June 1985.

Patent Licensing and R&D Rivalry, *American Economic Review Papers and Proceedings*, May 1985.

Equilibrium Unemployment as a Worker Discipline Device, with Joseph E. Stiglitz, *American Economic Review*, June 1984.

Informative Advertising with Differentiated Products, with Gene M. Grossman, *Review of Economic Studies*, January 1984.

Premiums for High Quality Products as Returns to Reputation, *Quarterly Journal of Economics*, November 1983.

Consumer Protection in the United States, *Zeitscrift für die gesamte Staatswissenschaft*, *Journal of Institutional and Theoretical Economics*, October 1983.

A Theory of Factor Mobility, with Gene M. Grossman, *Journal of Political Economy*, October 1982.

Optimal Pricing of Experience Goods, *Bell Journal of Economics*, Autumn 1983.

Consumer Information, Product Quality, and Seller Reputation, *Bell Journal of Economics*, Spring 1982.

Advertising and Welfare: Comment, *Bell Journal of Economics*, Autumn 1980.

Working Papers, Research Memoranda, Work in Progress

Unilateral Effects Analysis After *Oracle*, Roundtable Discussion (multiple participants), *Antitrust Magazine*, Spring 2005.

The Role of Innovation in Competitive Analysis, Chair's Showcase Program (multiple participants), *Antitrust Source*, July 2005.

Linux Adoption in the Public Sector: An Economic Analysis, 2003, with Hal R. Varian.

Competition Policy and Innovation, Prepared for the Directorate for Science, Technology, and Industry, OECD, STI Working Paper No. 2002/11, April 2002, www.oecd.org/sti.

U.S. Government Information Policy, with Hal R. Varian, prepared for the Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), U.S. Department of Defense, August 1997.

Economic Models of Counterfeiting, with Gene M. Grossman, Report to the U.S. Department of Labor, International Labor Affairs Bureau, January 1988.

Book Reviews

Review of *Bandwagon Effects in High-Technology Industries* by Jeffrey H. Rohlfs, in the Journal of Economics, 2003.

Review of *Will E-Commerce Erode Liberty? Review of Code and Other Laws of Cyberspace*, by Lawrence Lessig, in the Harvard Business Review, May/June 2000.

Review of *Sunk Costs and Market Structure: Price Competition, Advertising, and the Evolution of Concentration*, by John Sutton, in the Journal of Economic Literature, 1993.

Review of *Controlling Industrial Pollution: The Economics and Politics of Clean Air*, by Robert W. Crandall, in the Journal of Economic Literature, June 1984, pp. 625-627.

Qualifications:

For 30 years, I have been studying how American companies compete and innovate. My research, consulting, and government service have been directed at establishing and maintaining a legal and regulatory system that promotes economic growth through effective competition and innovation.

I earned my Ph.D. in Economics from M.I.T. in 1981. I was a Professor at Princeton University during the 1980s. For the 1989-1990 academic year, I was a Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University. In 1990, I joined the faculty at the University of California at Berkeley, where I hold a joint appointment in the Haas School of Business and the Department of Economics. In 1994, I was honored with an endowed chair, the Transamerica Chair in Business Strategy. From 1998 to 2008 I was Director of the Institute of Business and Economic Research.

I have published approximately one hundred articles, many in top economics journals. My book with Hal Varian, *Information Rules: A Strategic Guide to the Network Economy*, published in 1999 by the Harvard Business School Press, received critical acclaim for its application of economic principles to the information economy. *Information Rules* has been widely read by managers and adopted for classroom use.

I helped found the *Journal of Economic Perspectives*, a publication of the American Economic Association. The *JEP* provides economic analysis of a wide range of public policy issues and serves as an accessible source for state-of-the-art economic thinking. I served as Co-Editor from 1986 to 1993 and Editor from 1993 to 1995.

I have applied my expertise in a very wide range of industries, regularly serving as a consultant for American companies. Industries I have studied include: the information and communication technology sector; pharmaceuticals, medical devices, health care services, and health insurance; crude oil, gasoline, pipelines, and chemicals; electricity; banking and other financial institutions; telecommunications and media; airlines, railroads, and automobiles; defense procurement; branded consumer products; and more. All of this industry experience should be invaluable when giving advice, regarding the effectiveness and impact on American businesses of various proposed regulations, should I be confirmed as a Member of the Council of Economic Advisers. I have also founded my own company and served on the Board of Directors of a publicly traded company.

During the past two years, I have been the chief economist in the Antitrust Division of the Department of Justice. I held this same position during 1995-1996. In this post, I have gained experience applying economic learning to Federal law enforcement and policymaking. I also have seen, from inside the Federal government, how government rules and regulations affect American competitiveness, innovation, and consumers.

PREPARED STATEMENT OF PETER A. DIAMOND

TO BE A MEMBER OF THE BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

MARCH 8, 2011

Chairman Johnson, Senator Shelby, and Members of the Committee, I am honored to have been nominated by President Obama to be a member of the Board of Governors of the Federal Reserve System and grateful to this Committee for having me here today.

If confirmed, I will work to the best of my abilities to fulfill the responsibilities of this office. Those responsibilities have always been significant. The experience of the recent financial crisis and the ensuing financial reform legislation have underlined the multiple responsibilities of the Fed in working to foster maximum employment and price stability. The Fed has much work ahead in order to implement and fulfill the tasks laid out by the financial reform legislation. I would be honored and pleased to be part of the process of responding to this challenge.

I studied both mathematics and economics as an undergraduate at Yale University. I received my Ph.D. in economics from the Massachusetts Institute of Technology (MIT) in June 1963. Since then I have been a faculty member, first at the University of California at Berkeley, and, since 1966, at MIT. Throughout this period I have taught and done research in economics. My primary focus in both graduate teaching and research has been economic theory, particularly macroeconomics, search theory, and public finance. Within public finance, my primary focus has been on taxes, pensions, and social insurance, particularly Social Security. I have done both theoretical analyses and policy analyses. At the undergraduate level I have taught microeconomics, macroeconomics, public finance, money and banking, and law and economics. Being a member of two economics departments with great collegial interactions, I have gained wide knowledge in a variety of economics topics, as well as detailed knowledge in my areas of expertise.

A central theme in my research career has been how the economy deals with risks, both risks at the individual level and risks that affect the entire economy. I have thought extensively and written about the risks in the economy, and how markets and Government can combine to make the economy function better. In particular, the research that led to my being a corecipient of the Nobel Prize in Economic Sciences [1] has addressed how the costs and delays in learning about market opportunities affect the workings of the economy. As noted by the prize committee, the basic research on this topic has been used as a starting place for applied research in a wide variety of areas—not only the housing and labor markets where sizable delays are clearly visible, but also in monetary theory and analysis of the capital market. Indeed, the varying speeds between the occurrence of surprises to financial firms and their abilities to respond is a central element in the development of financial crises, making search theory an important part of understanding how to avoid and limit future shocks to the financial system.

In sum, I believe my background would prove very helpful at the Federal Reserve, particularly as a part of the process of addressing our heightened awareness of the dangers of systemic risks. If confirmed, I would welcome the opportunity to help address the important issues that have been raised by the financial crisis, as well as the longstanding issues and concerns in monetary policy and bank regulation that the Federal Reserve faces.

Thank you again for holding today's hearing; I would be pleased to answer your questions.

[1] The full name is the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel.

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name:	Diamond	Peter	Arthur
	(Last)	(First)	(Other)

Position to which nominated: Governor, Board of Governors of the Federal Reserve System

Date of nomination: 05 01 2011

Date of birth: 29 (Day) 04 (Month) 1940 (Year) **Place of birth:** New York, NY

Marital Status: married **Full name of spouse:** Priscilla Gibbs Myrick Diamond

Name and ages of children:

Matthew Louis Myrick Diamond, 38

Andrew Flagg Brin Diamond, 31

Education:

Institution	Dates attended	Degrees received	Dates of degrees
Yale	1957-1960	BA	1960
MIT	1960-1963	Ph.D.	1963

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

See Attachment 1

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization Office held (if any) Dates

See Attachment 2

Employment record: List below all positions held since college, including the title or description of job, name of employment, location of work, and inclusive dates of employment.

See Attachment 3

Government Experience: List any experience in or direct association with Federal, State, or local governments, including any advisory, consultative, honorary or other part time service or positions.

See Attachment 4

Published

Writings: List the titles, publishers and dates of books, articles, reports or other published materials you have written.

See Attachment 5

Political Affiliations and activities: List memberships and offices held in and services rendered to all political parties or election committees during the last 10 years.

None

Political Contributions: Itemize all political contributions of $500 or more to any individual, campaign organization, political party, political action committee or similar entity during the last eight years and identify specific amounts, dates, and names of recipients.

None

Qualifications: State fully your qualifications to serve in the position to which you have been named. (attach sheet)

See Attachment 6

Future employment relationships:

1. Indicate whether you will sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate.

I will take leave without pay from MIT until some date in the window July 1, 2011 to June 30, 2012, when I will retire from MIT.

2. As far as can be foreseen, state whether you have any plans after completing government service to resume employment, affiliation or practice with your previous employer, business firm, association or organization.

I will take leave without pay from MIT until some date in the window July 1, 2011 to June 30, 2012, when I will retire from MIT. After retirement, I am eligible to return to MIT as a professor emeritus and may do so.

3. Has anybody made you a commitment to a job after you leave government?

No, except I could return to MIT if I return within 2 years.

4. Do you expect to serve the full term for which you have been appointed?

Yes

Potential conflicts of interest:

1. Describe any financial arrangements or deferred compensation agreements or other

continuing dealings with business associates, clients or customers who will be affected by policies which you will influence in the position to which you have been nominated.

I retain the ability to return to MIT within two years of my taking leave. Between July 1, 2011 and June 30, 2012, I will be eligible to retire and receive a lump sum payment equivalent in value to one academic year salary, pursuant to MIT's Faculty Renewal Program. My 401(k) and 457 pension plans remain at MIT, as does a defined benefit pension.

2. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Federal Reserve Board's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the agency's ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

3. Describe any business relationship, dealing or financial transaction (other than tax paying) which you have had during the last 10 years with the Federal Government, whether for yourself, on behalf of a client, or acting as an agent, that might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Federal Reserve Board's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the agency's ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

4. List any lobbying activity during the past ten years in which you have engaged in for the purpose of directly or indirectly influencing the passage, defeat or modification of any legislation at the national level of government or affecting the administration and execution of national law or public policy.

I have not lobbied, but I have commented on public policy issues and potential legislation through my writings and speeches. I have infrequently had conversations about public policy with federal officials and members of Congress.

5. Explain how you will resolve any conflict of interest that may be disclosed by your responses to the items above.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Federal Reserve Board's designated agency ethics official to identify potential conflicts of interest. Any potential conflicts of interest will be resolved in accordance with the terms of an ethics agreement that I have entered into with the agency's ethics official and that has been provided to this Committee. I am not aware of any other potential conflicts of interest.

Civil, criminal and investigatory actions:

1. Give the full derails of any civil or criminal proceeding in which you were a defendant or any inquiry or investigation by a Federal, State, or local agency in which you were the subject of the inquiry or investigation.

None

2. Give the full details of any proceeding, inquiry or investigation by any professional association including any bar association in which you were the subject of the proceeding, inquiry or investigation.

None

Attachment 1 Peter A Diamond

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

NDEA graduate fellowship, 1960-61
NSF Cooperative graduate fellowship, 1961-62
Ford Doctoral Dissertation 1962-63
MIT Special Fund Graduate School Award 1962-63
Social Science Research Fellow, 6/65-12/65
Guggenheim Fellow, 1/66-9/66, 9/82-6/83
Fellow, Econometric Society, elected 1968
Fellow, American Academy of Arts and Sciences, elected 1978
Mahalanobis Memorial Award, 1980
Member, National Academy of Sciences, elected 1984
Founding Member, National Academy of Social Insurance, 1988
Nemmers Prize, 1994
Fulbright Fellow, University of Siena, 2000
Distinguished CES Fellow, 2000
Killian Award, MIT, 2003-4
Samuelson Award from TIAA-CREF, 2003
Jean-Jacques Laffont Prize, 2005
Robert M. Ball Award, 2008
Honorary doctorate, Hebrew University, Jerusalem, June 6, 2010.
The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, December 10, 2010.

Attachment 2 Peter A Diamond

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Office held (if any)	Dates
Econometric Society	Member	1963 to date
	Council	1981-86
	2nd Vice President	1989
	1st Vice President	1990
	President	1991
	Past President	1992
American Economic Association	Member	1963 to date
	Vice-President	1986
	President-Elect	2002
	President	2003
	Past-President	2004
National Academy of Social Insurance	Founding member	1988 to date
	President	1994-97
	Chair of Board	1996-98
	Board member	1998-2001
	Chair, Panel on Social Security Privatization	1996-98
National Bureau of Economic Research	Research Associate	1991 to date
CESifo	Research Fellow	2000 to date
Center for Retirement Research at Boston College	Affiliated researcher	1998 to date
Lake Sunapee Yacht Club	none	1984 to date
Cambridge Boat Club	none	1992 to date
Isidor Wiesbader Foundation	Member	2000 to date
	Secretary-Treasurer	2000-2001
	President	2001-2010
TIAA-Cref Institute	Fellow	2004 to date
Institute for Fiscal Studies	Int'l Research Fellow	2007 to date
Hamilton Project, Brookings Institution	Member, Advisory Council	2006 to date
Scholars' Strategy Network	Member, Advisory Board	2009 to date

New Palgrave Dictionary of Economics	Member, editorial board	2005 to date
National Academy of Sciences	Member, Panel on Retirement Income Modeling	1995
Journal of Economic Theory	Associate Editor	1969-71
Journal of Public Economics	Associate Editor Co-editor Advisory Editor	1971-86 1986-95 1996 to date

Attachment 3 Peter A Diamond

Employment record: List below all positions held since college, including the title or description of job, name of employment, location of work, and inclusive dates of employment.

Yale University, New Haven CT, research assistant, summer 1960

M.I.T., Cambridge MA, research assistant, summer 1961

Rand Corporation, Santa Monica, CA, researcher, summer 1962

Council of Economic Advisers, Washington DC, intern, summer 1963

University of California, Berkeley, Assistant Professor, 1963-65; Acting Associate Professor, 1965-66.

M.I.T., Cambridge MA, Associate Professor, 1966-70; Professor, 1970-88; John and Jennie S. MacDonald Professor, 1989-91; Paul A. Samuelson Professor, 1992-97; Institute Professor, 1997 to date; Department Head, 1985-86

VISITING APPOINTMENTS:

Churchill College, Cambridge, UK, 1965-66
University College, Nairobi, Kenya, 6/68-1/69
Hebrew University, Jerusalem, Israel, 1/69-6/69
Nuffield College, Oxford, UK, 6/69-9/69
Balliol College, Oxford, UK, 1973-74
Harvard University, Cambridge, MA, 1977-78, 9/81-1/82, 1982-3, 1989-90, 1991-2
European University Institute, Florence, Italy, 3/92
University of Siena, Siena, Italy, 4-6/2000

Self-employed lecturer and consultant since 1963. I have given many lectures and done some consulting for a variety of clients. The most extensive consulting job was for Exxon Corporation, for which I consulted and wrote about both contingent valuation and punitive damages.

Attachment 4 Peter A Diamond

Government Experience: List any experience in or direct association with Federal, State, or local governments, including any advisory, consultative, honorary or other part time service or positions.

Summer intern, Council of Economic Advisers, 1963

Town Meeting Member, Lexington MA 1988, 1990 – 1994, 1996 – 1999

Member, Panel on Social Security Financing consulting to U.S. Senate Finance Committee, 1974-75

Member, Consultant Panel on Social Security of the Congressional Research Service, 1975-76

Consultant to National Commission on Social Security, 1980

Member, Panel of Technical Experts consulting to Advisory Council on Social Security, 1989-90

Chair, Expert Panel on the Future of Retirement Income and Health Care Financing consulting to Advisory Council on Social Security, 1991

Member, Chief Justice's Commission on the Future of the Courts, Massachusetts, 1991-92

Member, Panel on Trends and Issues in Retirement Savings consulting to Advisory Council on Social Security, 1994-95

Member, Blue Ribbon Panel on the State's Retirement Group Classification System, Committee on Public Service, Massachusetts Legislature, 2006

Member, Special Commission to Study the Massachusetts Contributory Retirement Systems, 2009.

Attachment 5 Peter A Diamond

Published
Writings: List the titles, publishers and dates of books, articles, reports or other published materials you have written.

BOOKS

1. Uncertainty in Economics, Readings and Exercises (edited with M. Rothschild), San Diego: Academic Press, 1978, revised edition, 1989.

2. A Search Equilibrium Approach to the Micro Foundations of Macro-economics, 1982 Wicksell Lectures, Cambridge: MIT Press, 1984.

3. Growth, Productivity, Unemployment: Essays to Celebrate Bob Solow's Birthday, Cambridge: MIT Press, 1990 (edited volume).

4. On Time: Lectures on Models of Equilibrium, Churchill Lectures, Presented May 4, 5, 1993 at Cambridge University, Cambridge: Cambridge University Press, 1994.

5. Social Security: What Role for the Future? (Edited with D. Lindeman, and H. Young), Washington: Brookings, 1996.

6. Issues in Privatizing Social Security, Report of an Expert Panel of the National Academy of Social Insurance, Cambridge: MIT Press, 1999 (edited volume).

7. Social Security Reform, the 1999 Lindahl Lectures, Oxford: Oxford University Press, 2002.

8. Taxation, Incomplete Markets and Social Security the 2000 Munich Lectures, Cambridge: MIT Press, 2002.

9. Saving Social Security: A Balanced Approach (with Peter R. Orszag) Washington: Brookings Institution Press, 2004, revised edition 2005.

10. Behavioral Economics and Its Applications (edited with Hannu Vartiainen), Princeton: Princeton University Press, 2007.

11. Reforming Pensions: Principles and Policy Choices (with Nicholas Barr), Oxford: Oxford University Press, 2008.

12. Pension Reform: A Short Guide (with Nicholas Barr), Oxford: Oxford University Press, 2010.

PUBLISHED PAPERS:

1. "Stationary Utility and Time Perspective" (with T. C. Koopmans and R. E. Williamson), Econometrica 32 (1/2), January-April 1964, 82-100.

2. "Optimal Growth in a Model of Srinivasan," Yale Economic Essays, Spring 1964, 273-277.

3. "The Evaluation of Infinite Utility Streams," Econometrica 33 (1), January 1965, 170-177.

4. "Disembodied Technical Change in a Two-Sector Model," Review of Economic Studies XXXII (2), April 1965, 161-168.

5. "On the Cost of Tax Exempt Bonds," Journal of Political Economy LXXIII (4), August 1965, 399-403.

6. "Technical Change and the Measurement of Capital and Output," Review of Economic Studies XXXII, October 1965, 289-298.

7. "National Debt in a Neoclassical Growth Model," American Economic Review LV (5), Part 1, December 1965, 1126-1150.

8. "Optimal Paths of Capital Accumulation under the Minimum Time Objective - A Comment," Econometrica 34 (4), October 1966, 886-887.

9. "The Role of a Stock Market in a General Equilibrium Model with Technological Uncertainty," American Economic Review LVII (4), September 1967, 759-776.

10. "Cardinal Welfare, Individualistic Ethics, and Interpersonal Comparison of Utility: Comment," Journal of Political Economy 75 (5), October 1967, 765-766.

11. "Negative Taxes and the Poverty Problem - A Review Article," National Tax Journal XXI (3), September 1968, 288-303.

12. "The Opportunity Costs of Public Investment: Comment," Quarterly Journal of Economics LXXXII, November 1968, 682-688.

13. "Effective Protection of the East African Transfer Taxes," East African Economic Review, December 1968, 37-48.

14. "On the Economics of Tourism," East African Economic Review, December 1969, 53-62.

15. "Incidence of an Interest Income Tax," Journal of Economic Theory 2 (3), September 1970, 211-224.

16. "Optimal Taxation and Public Production, I: Production Efficiency" and "II: Tax Rules" (with J.A. Mirrlees), American Economic Review LXI (1), March 1971, 8-27 and LXI (3), Part I, June 1971, 261-278.

17. "Customs Valuation and Transport Choice" (with F. Mitchell), Journal of International Economics 1 (1), February 1971, 119-126.

18. "A Model of Price Adjustment," Journal of Economic Theory 3 (2), June 1971, 156-168.

19. "Implications of the Theory of Rationing for Consumer Choice Under Uncertainty" (with M.E. Yaari), American Economic Review LXII (3), June 1972, 333-343.

20. "Aggregate Production with Consumption Externalities" (with J.A. Mirrlees), Quarterly Journal of Economics LXXXVII (1), February 1973, 1-24.

21. "Taxation and Public Production in a Growth Setting," in J.A. Mirrlees and N. H. Stern, eds., Models of Economic Growth, (London: MacMillan, 1973).

22. "Consumption Externalities and Imperfect Corrective Pricing," Bell Journal of Economics and Management Science 4 (2), autumn 1973, 526-538.

23. "Single Activity Accidents," Journal of Legal Studies 3 (1), January 1974, 107-162.

24. "Some Uses of the Expenditure Function in Public Finance" (with D. McFadden), Journal of Public Economics 3, February 1974, 3-21.

25. "Increases in Risk and in Risk Aversion" (with J. Stiglitz), Journal of Economic Theory 8 (3), July 1974, 337-360.

26. "Accident Law and Resource Allocation," Bell Journal of Economics and Management Science 5 (2), autumn 1974, 366-405.

27. "Inflation and the Comprehensive Tax Base," Journal of Public Economics 4, August 1975, 227-244; correction Journal of Public Economics 16 (1), August 1981, 129.

28. "A Many-Person Ramsey Tax Rule," Journal of Public Economics 4, November 1975, 335-342.

29. "On the Assignment of Liability: The Uniform Case" (with J.A. Mirrlees), Bell Journal of Economics and Management Science 6 (2), Autumn 1975, 487-516.

30. "Private Constant Returns and Public Shadow Prices" (with J.A. Mirrlees), Review of Economic Studies XLIII (1), February 1976, 41-47.

31. "A Model of Lifetime Earnings Patterns" (with R. Anderson and Y. Balcer), in Report of the Consultant Panel on Social Security to the Congressional Research Service, April 1976.

32. "Social Security Benefits with a Lengthening Averaging Period" (with Y. Balcer), Journal of Risk and Insurance XLIV (2), June 1977, 259-265.

33. "Insurance Theoretic Aspects of Workers' Compensation," in A. Blinder and P. Friedman, ed., Natural Resources, Uncertainty, Dynamics, and Trade: Essays in Honor of Rafael Lusky, 1977.

34. "A Framework for Social Security Analysis," Journal of Public Economics 8, 1977, 275-298.

35. "Measurement of the Elasticity of Substitution and Bias of Technical Change" (with D. McFadden and M. Rodriguez), in Production Economics: A Dual Approach to Theory and Applications, M. Fuss and D. McFadden, eds. (Amsterdam: North-Holland, 1978).

36. "Welfare Analysis of Imperfect Information Equilibria," Bell Journal of Economics 9 (1), Spring 1978, 82-105.

37. "Tax Incidence in a Two Good Model," Journal of Public Economics 9 (3), June 1978, 283-299.

38. "A Model of Social Insurance with Variable Retirement" (with J.A. Mirrlees), Journal of Public Economics 10, 1978, 295-336.

39. "An Equilibrium Analysis of Search and Breach of Contract, I: Steady States" (with E. Maskin), Bell Journal of Economics 10 (1), Spring 1979, 282-316.

40. "Research Agenda on Pensions," in T. Gustafson ed., Work Income, and Retirement of the Aged: Report of a Workshop, U.S. Department of Health, Education, and Welfare, 1979.

41. "Income Taxation with Fixed Hours of Work," Journal of Public Economics 13, February 1980, 101-110.

42. "Efficiency with Uncertain Supply," Review of Economic Studies XLVII, July 1980, 645-651.

43. "Optimal Taxation in a Stochastic Economy: A Cobb-Douglas Example" (with L.J. Helms and J.A. Mirrlees), Journal of Public Economics 14, August 1980, 1-29.

44. "An Alternative to Steady State Comparisons," Economic Letters 5, 1980, 7-9.

45. "Mobility Costs, Frictional Unemployment, and Efficiency," Journal of Political Economy 89 (4), August 1981, 798-812.

46. "An Equilibrium Analysis of Search and Breach of Contract II: A Non-Steady State Example" (with E. Maskin), Journal of Economic Theory 25 (2), October 1981, 165-195.

47. "Wage Determination and Efficiency in Search Equilibrium," Review of Economic Studies XLIX, 1982, 217-227.

48. "Protection, Trade Adjustment Assistance, and Income Distribution," in J. Bhagwati, ed., Import Competition and Response, NBER (Chicago: University of Chicago Press, 1982).

49. "Aggregate Demand Management in Search Equilibrium," Journal of Political Economy 90 (5), 1982, 881-94.

50. "Money in Search Equilibrium," Econometrica 52 (1), January 1984, 1-20.

51. "Individual Retirement and Savings Behavior" (with J. Hausman), Journal of Public Economics 23, (1/2), February/March 1984, 81-114.

52. "Retirement and Unemployment Behavior of Older Men" (with J. Hausman), in H.J. Aaron and G. Burtless, eds., Retirement and Economic Behavior (Washington, D.C.: The Brookings Institution, 1984), 97-134.

53. "Insurance Aspects of Pensions" (with J.A. Mirrlees), in D. Wise, ed., Pensions, Labor and Individual Choice, NBER (Chicago: University of Chicago Press, 1985), 317-356.

54. "The Distribution of Inventory Holdings in a Pure Exchange Barter Search Economy" (with J. Yellin), Econometrica 53 (2), March 1985, 409-432.

55. "Payroll-Tax Financed Social Insurance with Variable Retirement" (with J.A. Mirrlees), Scandinavian Journal of Economics 88 (1), 1986, 25-50.

56. "Comment on K.G. Jungenfelt, 'Intertemporal Aspects of Learning New Techniques: Implications for Efficiency and Distribution,'" Scandinavian Journal of Economics 88 (1), 1986, 189-194.

57. "Consumer Differences and Prices in a Search Model," Quarterly Journal of Economics, May 1987, 429-436.

58. "Credit in Search Equilibrium," in Institute of Economics, Academia Sinica, Symposium on Monetary Theory, 1987, revised version in M. Kohn and S.-C. Tsiang eds., Finance Constraints, Expectations, and Macroeconomics (Oxford: Oxford University Press, 1988), 95-119.

59. "Equilibrium without an Auctioneer," in T. Bewley, ed., Advances in Economic Theory, (Cambridge: Cambridge University Press, 1987), 363-78.

60. "Multiple Equilibria in Models of Credit," American Economic Review Papers and Proceedings 77 (2), May 1987, 82-86.

61. "Optimal Tax Theory and Development Policy: Directions for Future Research," in Newbery and Stern, eds., The Theory of Taxation for Developing Countries (Oxford: Oxford University Press, 1987), 639-647.

62. "Search Theory," in The New Palgrave, MacMillan Press, 1987.

63. "Pricing and the Distribution of Money Holdings in a Search Economy, II" (with J. Yellin), in W. Barnett and K. Singleton eds., New Approaches to Monetary Economics (Cambridge: Cambridge University Press, 1987), 311-324.

64. "Rational Expectations Business Cycles in Search Equilibrium" (with D. Fudenberg), Journal of Political Economy XCVII, 1989, 606-19; correction Journal of Political Economy XCIX (1), 1991, 218-219.

65. "The Beveridge Curve" (with O. Blanchard), BPEA 1: 1989, 1-76.

66. "Comment on Murphy, Shleifer, and Vishny," NBER Macroeconomics Annual, 1989.

67. "Pairwise Credit in Search Equilibrium," Quarterly Journal of Economics, May 1990, 285-319.

68. "Inventories and Money Holdings in Search Equilibrium" (with J. Yellin), Econometrica 58 (4), July 1990, 929-950.

69. "The Aggregate Matching Function" (with O. Blanchard), in P. Diamond, ed., Growth, Productivity, Unemployment: Essays to Celebrate Bob Solow's Birthday (Cambridge: MIT Press, 1990).

70. "The Cyclical Behavior of the Gross Flows of U.S. Workers" (with O. Blanchard), BPEA 2, 1990, 85-155.

71. "Optimal Taxation of Identical Consumers when Markets are Incomplete" (with J.A. Mirrlees), in P.Dasgupta, D. Gale, O. Hart, and E. Maskin, eds., Essays in Honor of Frank Hahn (Cambridge: MIT Press, 1992).

72. "The Flow Approach to Labor Markets" (with O. Blanchard), AER Papers and Proceedings, May 1992, 354-359.

73. "Organizing the Health Insurance Market," Econometrica 60 (November 1992), 1233-1254.

74. "Search, Sticky Prices, and Inflation," Review of Economic Studies, 60 (January 1993) 53-68.

75. "On Contingent Valuation Measurement of Nonuse Values" (with J. Hausman), in J. Hausman, ed., Contingent Valuation: A Critical Assessment, Amsterdam: North Holland, 1993.

76. "Does Contingent Valuation Measure Preferences? Experimental Evidence" (with J. Hausman, G. Leonard, and M. Denning), in J. Hausman, ed., Contingent Valuation: A Critical Assessment (Amsterdam: North Holland, 1993).

77. "Issues in Social Insurance," 1993 Nancy L. Schwartz Memorial Lecture, Northwestern University, in Frontiers of Research in Economic Theory: The Nancy L. Schwartz Memorial Lectures, 1983-1997, Jacobs, Kalai and Kamein, eds., Cambridge University Press, 1998.

78. "Pension Reform in a Transition Economy: Notes on Poland and Chile," in O. Blanchard, K. Froot, and J. Sachs, editors, The Transition in Eastern Europe, Chicago; University of Chicago Press, 1994.

79. "Integrating Allocation and Stabilization Budgets," in J. Quigly and E. Smolensky, eds., Modern Public Finance, Cambridge: Harvard University Press, 1994.

80. "Privatization of Social Security: Lessons from Chile," Revista de Análisis Económico, 9 (Junio 1994) 21-23; revised version in P. Diamond, D. Lindeman, and H. Young (eds.), Social Security: What Role for the Future?, Washington: Brookings, 1996.

81. "Ranking, Unemployment Duration and Wages" (with O. Blanchard), Review of Economic Studies, 60 (July 1994) 417-434.

82. "Social Security Reform," (with S. Valdes-Prieto) in The Chilean Economy, B. Bosworth, R. Dornbusch, R. Laban, eds., Washington D. C.: Brookings Institution, 1994.

83. "Two Improvements in the Clinton Health Reform," Journal of Economic Perspectives 8 (3), Summer 1994, 61-66.

84. "Contingent Valuation: Is Some Number Better than No Number?" (with J. Hausman), Journal of Economic Perspectives 8 (4), Fall 1994, 45-64.

85. "Economic Aspects of Optimal Disability Insurance," (with E. Sheshinski), Journal of Public Economics 57 (1), May 1995, 1-23.

86. "Government Provision and Regulation of Economic Support in Old Age," in Bruno and Plesovic (eds.), Annual Bank Conference on Development Economics, 1995, Washington DC: The World Bank, 83-103.

87. "Discussion of the conceptual underpinnings of the contingent valuation method by A. C. Fisher," in D. Bjornstad and Kahn (eds.), The contingent valuation of environmental resources: methodological issues and research needs, 1996, Edward Elgar, pp. 61-71.

88. "Testing the Internal Consistency of Contingent Valuation Surveys," Journal of Environmental Economics and Management, 30, 1996, 337-347.

89. "Insulation of Pensions from Political Risk," in S. Valdes, (ed.), The Economics of Pensions: Principles, Policies, and International Experience, Cambridge University Press, 1996.

90. "On the Political Economy of Trade: Notes of a Social Insurance Analyst," in R. Feenstra, G. Grossman, and D. Irwin (eds.), The Political Economy of Trade Policy: Papers in Honor of Jagdish Bhagwati, MIT Press, 1996.

91. "Proposals to Restructure Social Security," Journal of Economic Perspectives, 10 (3), Summer 1996, 67-88.

92. "Public Provision of Pensions: The Doug Purvis Memorial Lecture," Canadian Public Policy, 22 (1), March 1996, 1-6.

93. "Generational Accounts and Generational Balance: An Assessment," National Tax Journal, 49 (4), 1996, 597-607.

94. "Money Illusion" (with E. Shafir and A. Tversky), Quarterly Journal of Economics 112 (2), May 1997, 341-374.

95. "Macroeconomic Aspects of Social Security Reform," Brookings Papers on Economic Activity, 1997, 2, 1-87.

96. "Optimal Income Taxation: An Example with a U-shaped pattern for the optimal marginal rates," American Economic Review 88 (1), March 1998, 83-95.

97. "Managerial Incentives: On the Near Linearity of Optimal Compensation," Journal of Political Economy 106(5), 1998, 931-957.

98. "Social Security and Retirement in the U.S." (with Jon Gruber), in Gruber and Wise (eds.), Social Security and Retirement around the World, University of Chicago Press,1998.

99. "Rationing Medical Care – An Economist's Perspective," Economics and Philosophy 14, 1998, 1-26.

100. "The Economics of Social Security Reform," in Arnold, R. D., Graetz, M. J., and Munnell, A. H. (eds.), Framing the Social Security Debate: Values, Politics, and Economics, National Academy of Social Insurance, Brookings Institution Press, 1998, 38-64.

101. "Social Security Reform with a Focus on Italy," Rivista Di Politica Economica,

December, 1999.

102. "Administrative Costs and Equilibrium Charges with Individual Accounts," in J. Shoven (ed.), Administrative Aspects of Investment-Based Social Security Reform, Chicago: University of Chicago Press, 2000, p. 137-172.

103. "Social Security Reform with a Focus on Sweden," Ekonomisk Debatt, 2000:3 (May).

104. "What Stock Market Returns to Expect for the Future?" Social Security Bulletin, Vol. 63 Iss. 2 p. 38-52 2000.

105. "Adjusting One's Standard of Living: Two Period Models," (with J.A. Mirrlees) in P. J. Hammond and G. D. Myles (eds.), Incentives, Organization, and Public Economics, papers in Honour of Sir James Mirrlees, Oxford; Oxford University Press, 2000.

106. "Social Insurance with Variable Retirement and Private Saving" (with J.A. Mirrlees), MIT Working Paper 296, 1982, forthcoming in Journal of Public Economics.

107. "Issues in Social Security Reform," in Sheldon Friedman and David Jacobs (eds.), The Future of the Safety Net: Social Insurance and Employee Benefits in the Next Century, IRRA Research Volume, 2001.

108. "Integrating Punishment and Efficiency Concerns in Punitive Damages for Reckless Disregard of Risks to Others," Journal of Law, Economics and Organization, Vol. 18, no. 1, Spring 2002.

109. "Delays in Claiming Social Security Benefits," (with C. Coile, J. Gruber, and A. Jousten), Journal of Public Economics, 84 (2002) 357-385.

110. "Social Security Reform with a Focus on the Netherlands," De Economist, Vol 149, No. 1, March 2001, 81-114.

111. "Savings and Portfolio Choice in a Two-Period Two-Asset Model," (with Saku Aura and John Geanakoplos), American Economic Review, 2002, No. 92 (4), 1185-91.

112. "Public Finance Theory – Then and Now", Journal of Public Economics, Vol. 86, no.3, December 2002, 311-318.

113. "Social Security Investment in Equities," (with John Geanakoplos), American Economic Review, Vol. 93, No. 4, September 2003, 1047-1074.

114. "Quasi-hyperbolic Discounting and Retirement," (with Botond Koszegi), Journal of Public Economics. Vol. 87, 2003, 1839-1872.

115. "Assessing the Plans Proposed by the President's Commission to Strengthen Social Security" (with Peter R. Orszag) Tax Notes, July 2002.

116. "An Assessment of the Proposals of the President's Commission to Strengthen Social Security" (with Peter R. Orszag), Contributions to Economic Analysis & Policy, Berkeley Electronic Press, 2002: Vol. 1: No. 1, Article 10.

117. "Reforming the GPO and WEP in Social Security" (with Peter Orszag). Tax Notes, November 2003.

118. "Accrual Accounting for Social Security" (with Peter Orszag), Harvard Journal on Legislation, Winter 2004, Vol. 41 pp. 173-187.

119. "Social Security," American Economic Review, March 2004, Vol. 94, No. 1, 1-24.

120. "Social Security Rules that Vary with Age" in Elsa Fornero and Paolo Sestito (eds.), Pension Systems: Beyond Mandatory Retirement. Edward Elgar, Northampton MA, 2005, Chapter 2, pgs 23-41.

121. "A Summary of Saving Social Security: A Balanced Approach." (with Peter Orszag), in Rachel Pruchno and Michael A. Smyer, (eds.), Challenges of an Aging Society: Ethical Dilemmas, Political Issues, 2007.

122. "Designing a Good Pension System" Bank of Italy, 2004.

123. "Saving Social Security" (with Peter R. Orszag), Journal of Economic Perspectives, Spring 2005. Vol 19 No. 2

124. "Social Security, the Government Budget and National Savings", in M. Szenberg, L. Ramrattan and A. A. Gottesman (eds) Samuelsonian Economics in the 21st Century, Oxford University Press, 2006.

125. "Annuities and Welfare" (with Tom Davidoff and Jeff Brown), American Economic Review, Vol. 95, No. 5, December 2005, pp. 1573-90.

126. "Reforming Public Pensions in the U.S. and the U.K." Economic Journal, Vol. 116, No. 509, February 2006, pp. F94-118.

127. "Conceptualization of Non-Financial Defined Contribution Systems" in Robert Holzmann and Edward Palmer, eds., Pension Reform, The World Bank, 2006.

128. "Optimal Tax Treatment of Private Contributions for Public Goods with and without Warm Glow Preferences", *Journal of Public Economics*, Vol. 90, No. 4-5, May 2006, pp. 897-919.

129. "The Economics of Pensions" (with Nicholas Barr), *Oxford Review of Economics Policy*, Vol. 22. No. 1, Spring 2006, pp. 15-39.

130. "Système de retraite et vieillissement de la population" Volume 20, pp21-49, April 2006. ("Pensions for an Aging Population") *Revue Française d'Economie*.

131. "The Public Pension Reform Debate in the U.S. and International Experience" *Risk Management and Insurance Review* 2006, 9, 1, 1-27.

132. "Comment on Mikhail Golosov, Aleh Tsyvinski, Iván Werning, New Dynamic Public Finance: A Users Guide, 2006, *NBER Macroeconomics Annual* 2007.

133. "An Interview with Peter Diamond, Giuseppe Moscarini and Randall Wright, *Macroeconomic Dynamics*, 11, 543-565, 2007.

134. "Behavioral Economics", *Journal of Public Economics,* Vol. 92, Issues 8-9, pp 1858-1862, 2008.

135. "Reforming Pensions: Principles, Analytical Errors and Policy Directions," (with N. Barr) *International Social Security Review,* Vol. 562, No.2, 2009.

136. "The Tax Base," (with J. Banks) in Mirrlees, J., Adam, S., Besley, T., Blundell, R., Bond, S., Chote, R., Gammie, M., Johnson, P., Myles, G. and Poterba, J. (eds), Dimensions of Tax Design: The Mirrlees Review, Oxford University Press for Institute for Fiscal Studies (Oxford), forthcoming, 2010.

137. "Taxes and Pensions," Southern Economic Journal, 76(1) 2-15, 2009.

138. "Reforming pensions: Lessons from economic theory and some policy directions" (with N. Barr) *Economia,* 2010.

139. "On the Future of Pensions and Retirements" in Z. Bodie, L. Siegel, and R. Sullivan (eds.) The Future of Life-Cycle Saving and Investing: The Retirement Phase, The Research Foundation of the CFA Institute, 2009.

140. "Sound Investments" The New Republic, November 9, 1998 at p. 18

141. "A long term Outlook for Stocks; Interview with Peter Diamond" Challenge. Vol. 43 Iss. 2 p. 6-16. (March/Apr 2000)

142. "Top Heavey Load: Trouble Ahead for Social Secuirty Systems" CESifo Forum: Munich, Vol 8 Iss. 3 p. 28-36 (Autumn 2007)

143. "Why we can afford Social Security" (with Peter Orszag), Generations, Vol 29, Iss. 1 p. 47-52 (Spring 2005)

144. "Social Security: The right fix" (with Peter Orszag), American Prospect, Vol 13, Iss, 17, p. 38-39 (Sept 23 2002)

145. "Contingent Valuation Measurement of Nonuse Values," with J. Hausman, ed. R.B. Stewart, Natural Resource Damages: A Legal, Economic, and Policy Analysis, 1995.

Reports and Issue Briefs

Panel on Social Security Financing consulting to U.S. Senate Finance Committee, 1975

Consultant Panel on Social Security of the Congressional Research Service, 1976

Expert Panel on the Future of Retirement Income and Health Care Financing consulting to Advisory Council on Social Security, 1991

Chief Justice's Commission on the Future of the Courts, Massachusetts, 1992

Social Security Reform in China: Issues and Options, 2005.

Blue Ribbon Panel on the State's Retirement Group Classification System, 2006

Economic Globalisation and Swedish Pensions, 2009.

Final Report of the Special Commission to Study the Massachusetts Contributory Retirement Systems, 2009.

Reforming Social Security in China: Report, May 2010.

Problems with State-Local Final Pay Plans and Options for Reform (with Alicia H. Munnell, Gregory Leiserson and Jean-Pierre Aubry), Center for Retirement Research at Boston College, Number 12, August 2010.

The 'brake' in the Swedish NDC pension (with Nicholas Barr), Center for Retirement Research at Boston College, Number 1, January, 2011

Working Papers

Capital Income Taxes with Heterogeous Discount Rates (with J. Spinnewijn) (National Bureau of Economic Research Working paper 15115, 2009).

Efficiency Effects of Punitive Damages (Department of Economics, Massachusetts Institute of Technology, Working Paper, No.97-17, September, 1997)

Integrating Punishment and Efficiency Concerns in Punitive Damages for Reckless Disregard of Risks to Others, (Department of Economics, Massachusetts Institute of Technology, Working Paper, No.97-19, 1997)

Letters to the Editor / Op-eds

Bad plan for Social Security; Privatization puts financing at risk, Concord Monitor, November 3, 2008

Social Security: Heat and Light (with Peter Orszag), N.Y. Times, February 19, 2005, at p. 14

Social Security: Questions to Ask (with Peter Orszag), N.Y. Times, December 1, 2004, at p. 30

A Reckelss Fiscal Policy, Boston Globe, February 1, 2003, at A14

Saving Social Security; Restoring Fiscal Soundness to the Program, Boston Globe, August 26, 2001, at D8

Cut Taxes? First, Cut the Deficit, New York Times, August 4, 1999, at p. 18

An exaggerated fear of Social Security, Boston Globe, July 5, 1999, at A15

Where's the Outrage Over Taxes?, N.Y. Times, March 5, 1999

Payroll tax hike would spare retirees' benefits, Boston Globe, February 23, 1999, at A23

Think Again Before Slicing Social Security Pie, N.Y. Times, January 3, 1997, at 26

Health Care for Everyone, N.Y. Times, June 28, 1991, at A27

The Right Medicine, N.Y. Times, May 27, 1991, at p. 18

(No available title) (with James Hickman, William Hsiao, and Ernest Moorhead), N.Y. Times, May 29, 1977

Attachment 6 Peter A Diamond

I studied both mathematics and economics as an undergraduate at Yale University, while majoring in mathematics. I received my Ph. D. in economics from the Massachusetts Institute of Technology (MIT) in June 1963. Since then I have been a faculty member, first at the University of California, Berkeley, and, since 1966, at MIT. Throughout this period I have taught and done research in economics. My primary focus in both graduate teaching and research has been economic theory, particularly general equilibrium theory and search theory, and public finance, with a primary focus on taxes, pensions, and social insurance, particularly Social Security. I have also done research in other areas, including macroeconomics, behavioral economics, and law and economics. I took classes at Harvard Law School as part of my preparation for doing research in law and economics. At the undergraduate level I have taught microeconomics, macroeconomics, public finance, money and banking, and law and economics.

Being a member of two economics departments with great collegial interactions, I have discussed many other topics with colleagues and attended seminars on many other topics as well. Thus I have wide knowledge of economics, as well as detailed knowledge in my areas of expertise. As a consequence, I have considerable awareness of the development of economic analyses of monetary policy and its impacts on both inflation and employment.

A central theme in my research career has been how the economy deals with risks, both risks at the individual level and risks that affect the entire economy. In all three of my central research areas, general equilibrium theory, search theory and social insurance, I have thought about and written about the risks in the economy and how markets and government can combine to make the economy function better for individuals. This includes analysis of unemployment using the approach of search theory, which was a major part of the citation when I was awarded the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for 2010 (together with Dale Mortensen and Christopher Pissarides). This background should be very helpful as the Federal Reserve is part of the process of addressing our heightened awareness of the dangers of systemic risks.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR REED FROM KATHARINE G. ABRAHAM

Q.1. What has your research shown on whether work sharing can be helpful to stem layoffs and be part of a strategy to help employers and employees in advance of the next recession? What thoughts do you have on how to best encourage work sharing?

A.1. My research has examined how employers adjust hours and employment in response to cyclical changes in demand. In other countries, more of the adjustment to changes in demand commonly takes the form of reductions in hours (work sharing) rather than reductions in employment (layoffs) than is the case in the United States. Work sharing as opposed to layoffs can have significant benefits for employers and workers. Companies can avoid the loss of valued employees who are laid off during a temporary downturn and the burden of the economic downturn is spread more equitably.

One factor that has contributed to the greater use of work sharing in these other countries is that workers whose hours have been reduced are eligible for prorated unemployment insurance benefits, referred to as short-time compensation. Similar prorated benefits are already available in 17 U.S. States. Changes to the U.S. unemployment insurance system to encourage work sharing, thereby reducing the need for layoffs, would be a step in the right direction in terms of mitigating job loss in future recessions.

Q.2. Can you provide your view of how the Recovery Act contributed to economic and employment growth and/or mitigated the effects of the economic downturn?

A.2. In my view, the Recovery Act contributed significantly to mitigating the effects of the economic downturn that began at the end of 2007 and worsened during 2008. It is of course inherently difficult to know exactly what would have happened had the Recovery Act not been passed. One way to estimate the effects of the Recovery Act is to predict the path that employment would have followed absent passage and then to compare what actually happened to that prediction. Another approach is to apply fiscal employment multipliers reported in the economics literature to the different types of spending under the Recovery Act to estimate the total employment effect. Previous CEA analyses using these two very different approaches yield estimates that are broadly consistent, showing employment as of the end of 2010 to have been roughly 3 million jobs higher than would have been the case without the Recovery Act. While it is important to recognize the uncertainty inherent in any such exercise, this seems to me to be a reasonable estimate of the Recovery Act's effects. Private analysts and the nonpartisan Congressional Budget Office have reached similar conclusions about the positive effects of the Recovery Act.

RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN JOHNSON FROM CARL SHAPIRO

Q.1. Given your academic and professional background, where do we find potential changes to current business regulation in order to spur economic growth? What opportunities are there to help bolster small businesses?

A.1. Regulations should be carefully tailored to impose the least burden on society consistent with achieving their stated goals, such as safety, health, or environmental protection. As an economist who has studied Government regulation of business for 30 years, I am a proponent of using economic incentives to encourage the desired behavior. If confirmed as a member of the Council of Economic Advisers, I look forward to pursuing these goals as articulated in the Executive Order issued by President Obama on January 18, 2011, "Improving Regulation and Regulatory Review."

Small businesses will benefit from the recently released Presidential Memorandum supporting the Regulatory Flexibility Act, which requires Federal agencies to consider regulatory flexibility to reduce the burden on small business. Small business also will be bolstered by the Administration's proposal to make permanent the 100 percent tax exemption on capital gains on qualified small business investments, and by the Administration's proposal to provide $2 billion of capital to small businesses.

Q.2. President Obama referenced the need for innovation along with education and investment as important factors to improve the economy. How could we incentivize innovation to achieve this?

A.2. Innovation—broadly defined as the process by which individuals and organizations generate new ideas and put them into practice—is absolutely critical to our economic growth and international competitiveness. One way to incentivize private-sector innovation is to improve the operation of our patent system. Administrative and legislative reforms for the Patent and Trademark Office can reduce the time it takes for an inventor to receive a patent and improve the quality of issued patents. A second way to incentivize innovation is to invest in basic research while facilitating the transfer of research findings from our universities and research labs into the private sector. A third way to incentivize innovation is to provide tax incentives for private firms that engage in research and development. Expanding and making permanent the Research and Experimentation (R&E) tax credit would serve this goal.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SHELBY FROM CARL SHAPIRO

Q.1. In your role as Deputy Assistant Attorney General at the Department of Justice (DOJ), you recently submitted a letter (DOJ letter) on a proposed Commodity Futures Trading Commission (CFTC) rule regarding ownership limitations and governance requirements for designated clearing organizations (DCOs), designated contract markets (DCMs) and swap execution facilities (SEFs).

Explain the nature of your personal involvement with the analyses and recommendations contained in the letter.

A.1. As Deputy Assistant Attorney General for Economics in the Antitrust Division, I was involved in preparing these comments. I supervised the staff economists who worked with staff attorneys to draft these comments. I gave input to the staff during the process, reviewed drafts, and recommended to Assistant Attorney General Christine Varney that these comments be filed at the CFTC.

Q.2. To the best of your knowledge, were there any relevant communications, written or oral, between the CFTC and DOJ's Antitrust Division prior to submission of the DOJ letter? If so, please explain.

A.2. To the best of my knowledge, DOJ staff met with CFTC staff to discuss the CFTC's proposed rules.

Q.3. Do you believe that impartial access is necessary to protect consumers and to promote competition?

A.3. Section 733 of the Dodd-Frank Act seeks to provide market participants with impartial access to SEFs. I believe impartial access to an SEF promotes competition among market participants on that SEF, which in turn helps protect consumers.

Q.4. If you do, explain why laws and/or regulations that require impartial access are not a sufficient solution. Explain why the DOJ letter advocates a solution that is inconsistent with American Airlines/British Airways alliance analogy referenced in your letter.

A.4. In my experience, it is desirable wherever possible to rely on market competition rather than Government regulations to protect consumers. Rules mandating access to a dominant platform can be difficult or costly to enforce, in part due to disputes regarding what constitutes "impartial access." Here, competition among SEFs may well provide additional protections to market participants, above and beyond those resulting from access regulations imposed on a dominant SEF.

In my opinion, the DOJ letter to the CFTC and the DOJ comments to the Department of Transportation (DOT) regarding the Star Alliance are consistent. The DOJ letter to the CFTC favors certain restrictions on the ownership and governance of SEFs. The DOJ letter argues that those restrictions will promote competition among SEFs without undermining the ability of SEFs to operate efficiently. The DOJ comments to DOT favor "carve-outs" on certain nonstop routes. The DOJ comments argue that these carve-outs will preserve competition on those routes without undermining the ability of the alliance to operate efficiently on other routes. In both cases, DOJ seeks to promote competition without undermining the efficiencies that can be achieved through a joint venture among rivals.

Q.5. If you do not, explain why your personal belief differs from the beliefs expressed in the DOJ Letter that you signed.

A.5. Not applicable.

Q.6. The DOJ letter states "[t]he Department believes that allowing three to five large participants in the derivatives sector to control a trading a platform would greatly increase the risk that those entities will use their control to block or limit rival dealers' or buy-side firms access to the platform." Do you agree with the belief that voting and ownership limitations are necessary?

A.6. I support efforts by the CFTC to put in place rules to mitigate potential conflicts of interest in the operation of trading platforms. In my opinion, voting and ownership limitations are important for this purpose.

Q.7. If you do: How do you reconcile this statement with Core Principle 2 in Section 733 of the Dodd-Frank Act, which states that a swap execution facility shall establish, among other things, "participation rules that will deter abuses . . . to provide market participants with impartial access to the market"? Explain why this explicit language does not directly address your concern that dealers would "block or limit rival dealers' or buy-side firms access to the platform."

A.7. Structural solutions that rely on market competition are often more effective and less onerous than ongoing oversight and regulation. In the current context, disputes may well arise regarding whether a given SEF provides "impartial access" to market participants who are actual or potential competitors to the entities controlling the SEF. The DOJ comment seeks to promote competition among SEFs. Effective competition among SEFs will tend to reduce the frequency and magnitude of disputes over "impartial access," since a market participant whose access to one SEF has been limited can trade on another SEF.

Q.8. How do you reconcile this statement with Dodd-Frank antitrust core principles for derivatives clearing organizations, swap execution facilities, and designated contract markets, which states that each entity "shall not adopt any rule or take any action that results in any unreasonable restraint of trade or impose any material anticompetitive burden on trading"? Explain why this explicit language does not directly address your concern that dealers would "block or limit rival dealers' or buy-side firms access to the platform".

A.8. Structural solutions that rely on market competition are often more effective and less onerous than ongoing oversight and regulation. In the current context, disputes may well arise regarding whether a given SEF has adopted any rule or taken any action "that results in any unreasonable restraint of trade" or imposes "any material anticompetitive burden on trading." The DOJ comment seeks to promote competition among SEFs. Effective competition among SEFs will tend to reduce the frequency and magnitude of these disputes, since any given SEF will have less market power that could be abused.

Q.9. Did you sign the letter supporting voting and ownership limitations because you believe that the CFTC will be unable to enforce this language?

A.9. I believe that structural solutions designed to mitigate potential conflicts of interest and to promote competition among SEFs will reduce the frequency and magnitude of disputes over compliance with the cited language, thereby reducing the cost and increasing the effectiveness of CFTC enforcement of this language.

Q.10. If you do not, explain why your personal belief differs from the beliefs expressed in the DOJ Letter that you signed.

A.10. Not applicable.

Q.11. Provide a real-world case that the DOJ has successfully argued where an exchange blocked market participants from trading on its execution platform.

A.11. I am not aware of any such example. Access to execution platforms is normally addressed by regulators rather than through enforcement of the Sherman Act.

Q.12. It is my understanding that it has been a long-standing DOJ Antitrust Division's policy to rely on "conduct remedies," that are conceptually analogous to Core Principle 2 in Section 733 of Dodd-Frank, as the preferred approach to deter anticompetitive conduct. "Structural remedies," including divestitures and ownership restrictions, are to be pursued only where conduct remedies have proven to be inadequate. Do you have any empirical evidence that conduct remedies are not adequate for DCMs, SEFs, and/or DCOs?

If you do, provide that evidence.

If you do not, explain how you reconcile the structural remedies approach taken in the DOJ letter with the DOJ's long-standing policy of relying on conduct remedies.

A.12. The DOJ does not have a long-standing policy of relying only on conduct remedies. DOJ approaches remedies on a case-by-case basis. In many situations, including horizontal mergers, the DOJ has historically preferred structural remedies to conduct remedies. The Antitrust Division Policy Guide to Merger Remedies, October 2004, available at *http://www.justice.gov/atr/public/guidelines/205108.pdf* states (p. 7): "Structural remedies are preferred to conduct remedies in merger cases because they are relatively clean and certain, and generally avoid costly Government entanglement in the market." This policy guide goes on to state (p. 8): "A conduct remedy, on the other hand, typically is more difficult to craft, more cumbersome and costly to administer, and easier than a structural remedy to circumvent."

Q.13. Question 2 asks (emphasis added): "To the best of your knowledge, were there any relevant communications, written or oral, between the CFTC and DOJ's Antitrust Division prior to submission of the DOJ letter? *If so, please explain.*"

Mr. Shapiro responded in the affirmative, but he did not provide any explanation. At a minimum, his explanation should include:

- A list all DOJ and CFTC individuals involved in those communications.
- A description of the nature of those communications.
- Answers to the following questions:
  - Who initiated those communications?
  - Did anyone from the CFTC or from the Administration request or direct anyone in the DOJ to send the letter? If so, please explain.
  - Did anyone from the CFTC or from the Administration review and/or edit the letter before it was submitted? If so, please explain.

A.13. To the best of my knowledge, DOJ staff met with CFTC staff to discuss the CFTC's proposed rules. However, I did not personally participate in any of these meetings, and I do not recall participating in any conference calls, e-mails, or other communications that may have taken place between DOJ and the CFTC.

My recollection from staff updates I reviewed at the time is that the initial recommendation to respond to the proposed CFTC rules came from career staff members in the Antitrust Division. Following that recommendation, I recall that DOJ initially contacted the CFTC to discuss these issues. To the best of my knowledge, DOJ attorneys Gene Kimmelman and Ihan Kim were involved in these communications. As the Deputy Assistant Attorney General for Economics, I was typically not involved in these sorts of communications. I do not know the names of any individual CFTC staff members who attended subsequent meetings with DOJ staff. While I am unaware of precisely which DOJ staff attended any particular meeting, I do know that DOJ economists Jeff Wilder, Charles Taragin, and Fan Zhang were studying these issues and I believe they each attended at least one meeting with the CFTC based upon the weekly reports I received from staff economists.

To the best of my knowledge, no members of the Administration outside of DOJ, or anyone from the CFTC, requested or directed anyone in DOJ to send the letter.

To the best of my knowledge, no members of the Administration outside of DOJ, or anyone from the CFTC, reviewed or edited the letter prior to its submission. As I noted in my prior responses to the Committee, I was involved in preparing these comments, and I supervised the DOJ staff economists who worked with DOJ staff attorneys to draft these comments. I gave input to the DOJ staff during the process, reviewed drafts, and recommended to Assistant Attorney General Christine Varney that these comments be filed at the CFTC.

RESPONSES TO WRITTEN QUESTIONS OF CHAIRMAN JOHNSON FROM PETER A. DIAMOND

Q.1. Dr. Diamond, you have worked on unemployment and economic growth. The models for which you won the Nobel Prize help us understand the ways in which unemployment, job vacancies, and wages are affected by regulation and economic policy.

Can you please explain how your expertise in employment and the job market is relevant to the mandate of the Federal Reserve Board of Governors?

What expertise and knowledge can you bring to the Board of Governors to facilitate the crafting and implementation of job growth policies as required by the Federal Reserve Act?

In addition to your knowledge of employment and the job market, what other expertise and skills can you bring to the Board of Governors of the Federal Reserve to achieve its vital objectives?

A.1. In turn, I will discuss how my extensive background as an economist and my expertise should be very valuable to the Fed in three key areas of its responsibility: monetary policy, bank supervision and regulation, and crisis prevention and amelioration. My background can be a helpful complement to the range of expertise of the current Board members.

It is important that monetary policy decisions reflect careful analysis of the labor market, along with information on inflation and inflation expectations and other aspects of economic performance. The current crisis has resulted in considerable discussion of the link between labor market performance—jobs lost, jobs sought, jobs offered—and desirable monetary policy. The crisis has caused unemployment to rise to a very high and painful level. With inflation very low at the same time, an accommodative monetary policy was implemented. After an extended period of economic decline, the economy began a slow recovery. For a period the unemployment rate showed little decline while the job vacancy rate grew, presenting a critical question for monetary policy of how best to interpret these developments. Some analysts saw them as calling into question the appropriateness of continuing with an accommodative monetary policy.

The framework that has served as the "industry standard" for interpreting outcomes in the labor market, referred to as the DMP model, was the basis for the Nobel Prize that I shared with Dale Mortensen and Christopher Pissarides. In addition to my role in creating the DMP model, I wrote a series of papers together with Olivier Blanchard (currently IMF chief economist) analyzing the empirical relationship between unemployment and vacancies over a typical business cycle as well as setting out a theoretical framework for such analysis. [1]

Relevant to the Fed mandate is my analysis of the current situation in the labor market in the Nobel Prize Lecture that I delivered in Stockholm on December 10, 2010, and in a much longer analysis that will appear in the American Economic Review in June 2011. This analysis went behind the aggregate numbers to examine hiring at the level of firms and industries. [2] This analysis led me to conclude that there was insufficient evidence that firms were experiencing increased difficulty in hiring qualified workers. Thus, I read the evidence as suggesting that the aggregate behavior of the labor market does not, in fact, signal a break in the efficiency of matching jobs and workers. That is, the pattern of hiring would likely return to normal after the economy had grown sufficiently to approach its potential output, apart from the lingering effects of long-term unemployment. As this discussion indicates, careful analysis of the labor market, an analysis in which I have considerable expertise and experience, is essential for setting monetary policy well.

The global financial crisis has added macroprudential considerations to the list of issues that must be addressed in the course of conducting supervision and regulation of banks. That is, it is not sufficient to ask whether the current position of a bank is sound, but also how the bank might be affected by adverse economic developments and whether the bank is at risk of contributing to widespread financial difficulties. In part, macroprudential issues are being addressed through the design of financial institution stress tests. Stress test design is in an early stage and will no doubt evolve with experience with stress testing itself, and with further

[1] "The Beveridge Curve", BPEA 1:1989, 1–76, "The Aggregate Matching Function", in P. Diamond (ed.) *Growth, Productivity, Unemployment: Essays To Celebrate Bob Solow's Birthday* (Cambridge: MIT Press), 1990, "The Cyclical Behavior of the Gross Flows of U.S. Workers", BPEA 2:1990, 85–155.

[2] Specifically, I examined the ratios of unemployment to vacancies across industries and the patterns of hiring relative to vacancies across industries, across firms of different sizes, and across firms with different growth rates. Also relevant is the decline in quits by employed workers, which imply a decline in replacement hiring.

research on the nature of systemic risks, particularly risks to the financial sector developing through direct and indirect connections between financial institutions. Analysis of these connections between firms will draw on models of the capital market, a subject that I have researched. Moreover, much of the concern about liquidity comes from the differences in speed between actions that impact financial institutions, such as a reduced availability of short-term financing, and the abilities of the financial institutions to respond. Analysis of dynamics in markets with direct lender-borrower relations is naturally built on search theory. While greatly different in detail, there is a parallel between the need for time to match workers and jobs and the need for time to match lenders and borrowers. Indeed, in its scientific background statement for my prize, the Nobel Prize committee included financial economics among the wide range of uses that have been made of search theory. Thus my expertise in both general equilibrium and search theories should be of great practical use in the development of bank supervision and regulation. [3]

The global financial crisis has greatly increased awareness of the importance of preserving financial stability. This has resulted in changes in the regulation of financial institutions world wide and in efforts by researchers to enhance our understanding of how crises happen, how to lower their likelihood, and how to reduce their negative impacts on the economy. Both regulation and research need to be ongoing processes. The research process and the analysis of regulatory rules take time and require feedback. Moreover, ongoing financial innovation means that the financial markets are themselves changing. It would be a mistake to limit regulatory and supervisory changes to the causes of the particular crisis we have experienced—crises can come in a variety of forms and the evolution of the economy will change the ways that crises can occur. My ability to understand how and when basic research is informative for policy design should be very useful at the Fed in crisis prevention and limitation. [4]

In sum my extensive background as an economist, and high level of expertise, should be very valuable to the Fed in three key areas of its responsibility: monetary policy, bank supervision and regulation, and crisis prevention and amelioration.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR VITTER FROM PETER A. DIAMOND

Q.1. The *Wall Street Journal* reported this week that PIMCO, the world's largest bond investor, has divested all holdings in U.S. treasuries. Fund managers pointed to potential bond price declines as the U.S. Government approaches the statutory debt limit and the approaching end to the Federal Reserve's second round of

[3] I discussed a paper on stress testing banks at the recent Monetary Policy Forum: Comments on "Stressed Out: Macroprudential Principles for Stress Testing", by David Greenlaw, Anil K Kashyap, Kermit Schoenholtz, and Hyun Song Shin, U.S. Monetary Policy Forum Report No. 5, Initiative on Global Markets, University of Chicago Booth School of Business, 2011.

[4] Also I can draw on my extensive experience studying and advising about social security systems in many countries. As with the financial system, social security systems must address individual risks and aggregate risks, they must function well in ordinary times and must weather financial crises.

quantitative easing (QE2). This was followed by the following two comments:

- "U.S. Government bonds are not a safe haven," Jim Rogers, the global investor who predicted the 2007–2009 housing-market crash, said in a telephone interview from Singapore. "I cannot conceive of lending money to the U.S. Government for 30 years."
- "Pacific Investment Management Co. said yesterday that Bill Gross, who runs the $237 billion Pimco Total Return Fund, eliminated Government-related debt from his flagship fund last month as the U.S. projected record budget deficits."

What do these comments say to you about QE2?

A.1. These comments seem to have been spurred mostly by three concerns: normal recovery from the recession, inflation risk, and the long-run fiscal challenge.

At present, the interest rates on longer-term Treasury debt are very low, and QE2 has contributed to these low rates. Once the recovery is far along and growth has picked up interest rates will rise, and QE2 will be unwound. Of course, the timing and magnitude of a rise in interest rates is uncertain. To help minimize uncertainties regarding the future course of long-term interest rates, the Federal Reserve has indicated that the eventual unwinding of its asset purchases will be done gradually, and will be carefully communicated in advance.

Regarding the prospects for inflation in the near and intermediate term, the Federal Reserve remains committed to its statutory objectives of maximum employment and stable prices. At present, underlying inflation remains low and inflation expectations have been stable. The Federal Open Market Committee (FOMC) has noted that it will regularly review the asset purchase program in light of changes in the economic outlook and that it will use its policy tools to support the economic recovery and help ensure that inflation, over time, remains at levels consistent with its mandate.

Regarding the fiscal outlook in the United States and the potential for inflation that could impair the value of investments in long-term Treasury securities, the Congress and the Administration will need to make tough decisions in coming years to address the Nation's fiscal challenges.

Q.2. Bill Gross also wrote that, "Yields on Treasuries may be too low to sustain demand for U.S. Government debt as the Federal Reserve approaches the end of quantitative easing." Do these comments give you pause about your previous support for QE2? If so, why? If not, why not?

A.2. The quotation suggests a concern that the demand for Treasuries may fall sharply as the QE2 program nears an end. However, Federal Reserve asset purchases appear to affect interest rates primarily by reducing the total stock of long-term securities available to the public rather than through the anticipated flow of new purchases. Thus, the effect of the purchases should not diminish as the program is wound down. Experience with the conclusions of Federal Reserve asset purchase programs conducted over 2009 and early 2010 generally supported this view; aggregate demand for securities did not fall and long-term interest rates did not increase sharply as those programs came to a close. Consistent with this historical experience, the term structure of interest rates suggests that most market participants do not expect a sharp increase in longer-term interest rates over coming months, even though investors do appear to anticipate that the asset-purchase program will be completed early this summer.

Q.3. What is the dollar value of U.S. Treasuries currently held by the Federal Reserve?

A.3. The Federal Reserve publishes information on its balance sheet weekly in the Board's H.4.1 statistical release (*http://www.federalreserve.gov/releases/h41/*). As of March 9, the Federal Reserve's holdings of U.S. Treasury securities stood at $1.27 trillion or about 14 percent of total marketable Treasury debt outstanding. By way of comparison, the Federal Reserve's holdings of U.S. Treasury securities in June of 2007, prior to the onset of the crisis, stood at about $0.79 trillion or about 18 percent of total marketable Treasury debt outstanding at the time.

Q.4. How does this compare to the amount of U.S. Treasury securities held by China or Japan?

A.4. According to the Treasury International Capital (TIC) data collected by the U.S. Department of the Treasury, mainland China and Japan held $1.16 trillion and $0.88 trillion of U.S. Treasury securities, respectively, as of December 2010.

Q.5. Given that QE2 is not yet halfway finished, what do you think will happen to the demand for Treasuries over the next few months?

A.5. U.S. Treasury securities are widely regarded as a safe and highly liquid financial instrument in global fixed income markets. The global demand for U.S. Treasury securities is likely to remain solid over coming months.

Q.6. Are you concerned that since QE2 other central banks and purchasers of Treasury securities have scaled back their purchases?

A.6. The Federal Reserve's purchases have been largely concentrated in previously issued Treasury securities. As a result, global investors have continued to be the primary source of demand for new Treasury securities. Demand at recent U.S. Treasury auctions has been solid, and market participants generally do not appear to be anticipating any significant waning in the global demand for Treasury securities over coming months.

Q.7. What, in your mind, are the potential long term risks with the QE2 strategy?

A.7. The Federal Reserve's asset purchase program is intended to put downward pressure on long-term interest rates. Lower long-term interest rates reduce the costs of borrowing for households and businesses and boost asset prices, thereby providing impetus to spending. The potential risks associated with this program are similar to the risks associated with monetary policy stimulus provided with conventional monetary policy tools. An accommodative policy stance that is maintained for too long could result in excessive growth in aggregate demand that would put upward pressure on prices, and could, if unchecked, result in an increase in long-term inflation expectations that could prove costly to reverse. The Federal Reserve will need to continue to monitor economic developments very carefully and can change policy if that is warranted, just as it can change interest rate policy using conventional monetary policy tools.

Q.8. How can we be confident that those who used to purchase Treasury securities, but have withdrawn due to the dramatic increase in Federal Reserve purchases, will return once QE2 is ended?

A.8. The Federal Reserve purchased $300 billion of Treasury securities in 2009, and markets adjusted readily to the conclusion of that program. In addition, the Federal Reserve purchased $1.25 trillion of agency MBS over 2009 and the first quarter of 2010, and markets again adjusted smoothly to the conclusion of that program. The level of activity in Treasury markets currently remains very high and the Federal Reserve's asset purchases represent only a modest proportion of total trading volume in U.S. Treasury securities. I see no reason to question the view that market participants generally expect a smooth conclusion to the Federal Reserve's current asset purchase program. Moreover, forward 10-year yields at horizons beginning beyond June do not suggest that investors see any special strains associated with the conclusion of the asset purchase program, and uncertainty about long-term Treasury yields embedded in options prices has actually moved lower over recent weeks.

Q.9. What are the implications of the Federal Reserve being the chief purchaser of our Nation's debt?

A.9. Since the stated intention of the FOMC is to continue the high level of purchases on a temporary basis and to unwind the holdings after that, I see no long-run implications of this program and a short-run implication of helping the economic recovery. Of course, care must be taken to monitor the economy to make sure the policy remains appropriate while it is in effect.

Q.10. In an Op-Ed entitled, "Health Care for Everyone", you suggested bundling families together into groups which private insurance companies would provide coverage too in the way that Fannie Mae and Freddie Mac bundle individual mortgages together. You have supported the bailouts of the megabanks during 2008 and the President's "stimulus" effort. Can you cite some instances where you don't believe that direct intervention of the Federal Government is the best policy answer?

A.10. Like most American economists, I begin with the presumption that the basic system of free enterprise is the most efficient way to organize economic activity. One of the great strengths of the American economy is the widely shared understanding that markets work and work well. Absent compelling evidence of market failure, intervention by the Federal Government would not benefit our economic functioning. Indeed, our own governmental experience—and much of the academic literature published during the past century—can be seen as working to identify and refine a list of conditions in which Government intervention might be capable of improving a purely market-based outcome. By now, the basic outlines of those conditions are well understood. Unless a given situation meets a well-understood test of market failure, most economists would counsel against Government intervention, and I share that consensus view. For example, policies of Government price regulation in competitive settings do not enhance market efficiency.

Q.11. On National Public Radio last October you said that investing in public works is worth the risk of increasing the deficit. Despite the fact that we are facing our third trillion dollar deficit in American history and in December Moody's warned that it may downgrade the U.S. credit rating do you still feel that investing in public works is worth the risk?

A.11. Projections of U.S. debt show an unsustainable path, and I strongly favor putting in place reforms that would move the U.S. to a sustainable fiscal path. Investing in public works, done right, can be an economically smart decision because the benefits of a well-designed investment can far outweigh the costs, thereby contributing to long-term economic growth. In light of the fiscal pressures that the country faces, it is important that each commitment of taxpayer resources be undertaken with careful thought to both costs and benefits. Moreover, while unemployment remains very high, it is particularly advantageous to put in place reforms that address the long-term trajectory of the debt while avoiding a combination of actions that risk slowing or reversing the current economic recovery.

Q.12. Mr. Diamond, as you may be aware, since the Federal Reserve lowered the Federal Funds rate to "0 to ¼ percent" the FOMC statement has included the following statement, the Fed "continues to anticipate economic conditions . . . are likely to warrant exceptionally low levels of the Federal funds rate for an extended period of time." Do you support the continued inclusion of that sentence in future FOMC statements?

A.12. I have not been part of the FOMC and have not received the detailed evaluations of the performance of the economy that members of the FOMC receive. If confirmed I will have an open mind to evaluate policies in light of the information and discussion that surrounds and occurs at FOMC meetings. While labor market conditions have improved somewhat of late, the unemployment rate remains very high and underlying inflation has declined over the last 2 years and is currently at a low level. Thus, I consider it worthwhile to encourage investments in both consumer durables and production assets. Sustaining low levels of the Federal funds rate for an extended period is one way to encourage such investments. As the economy recovers, the statement language will eventually need to change to be consistent with the Committee's developing assessment of the economic outlook and the appropriate stance of monetary policy.

Q.13. Would you vote against the inclusion of that sentence at the next meeting of the FOMC?

A.13. Without the benefit of participating in previous FOMC discussions of this issue, and without the information and discussion that will occur in the next FOMC meeting, I cannot say how I would vote if I did attend the next meeting. The evolution of the sentence noted, along with many other elements of the stance of policy, must be carefully evaluated in light of changes in the economic outlook.

Q.14. Many economists believe that dropping the "extended period" language from the FOMC would provide a crucial signal to the markets that the time of excessive, cheap liquidity will be coming to an end soon. What would it take for you to support removing that sentence from the FOMC statement?

A.14. The extended period language and other aspects of the current stance of policy reflect the current view of the FOMC on the needs of the economy. As such they will need to be adjusted as there are changes in the FOMC's assessment of the outlook for its dual mandate of maximum employment and price stability. Since the Committee, appropriately evaluates a very wide range of economic data in making its assessment, and I have not been party to the range of assessments considered at FOMC meetings, it is not possible to state precisely what changes in which variables would make a specific adjustment to the statement seem appropriate.